

RÉSUMÉ

ROBERTO STACK MURPHY ARTEAGA

TABLE OF CONTENTS

General Data.....	1
Academic Formation	2
Academic Degrees.....	3
Work Experience.....	4
Summary of Academic Activities	6
Most Recent Publications	7
Articles in Periodic Journals.....	8
Articles in Conference Proceedings.....	14
Summaries in Conference Proceedings	26
Technical Reports	30
General Interest Articles.....	31
Theses and Chapters in Books.....	35
Presentations in Conferences.....	36
Citations	55
Taught Courses	118
Directed Theses	133
External Projects.....	138
Continuing Education Courses	139
Memberships	140
Participation in Conference Organizing Committees	141
Volunteer Work for IEEE	148
Abbreviated Résumé	149

RÉSUMÉ

GENERAL DATA

NAME: Roberto Stack Murphy Arteaga
DATE OF BIRTH: January 3rd 1960
PLACE OF BIRTH: México City, México

PROFESSIONAL ADDRESS: Instituto Nacional de Astrofísica, Óptica y Electrónica
(INAOE) (National Institute for Research in
Astrophysics, Optics and Electronics)
Luis Enrique Erro # 1
Tonantzintla, Puebla
72840, México
(+52) (222) 266 3100, X 1407.

ELECTRONIC MAIL: rmurphy@ieee.org

1.- ACADEMIC FORMATION

Undergraduate: **Sep. 1978-May. 1982**
St. John's University. Collegeville, Minnesota, USA.

Master's: **Sep. 1986-Nov. 1988**
National Institute for Research in Astrophysics, Optics and Electronics,
Tonantzintla, Puebla, México.

Doctorate: **Aug. 1993- Jul. 1997**
National Institute for Research in Astrophysics, Optics and Electronics,
Tonantzintla, Puebla, México.

2.- ACADEMIC DEGREES

Bachelor of Science:

In Physics, May 23 1982, St. John's University, Collegeville, Minnesota, USA.

Master of Science:

In Microelectronics, November 30 1988, National Institute for Research in Astrophysics, Optics and Electronics, Tonantzintla, Puebla, México.

Doctor of Science:

In Electronics, July 4, 1997, National Institute for Research in Astrophysics, Optics and Electronics, Tonantzintla, Puebla, México.

3.- WORK EXPERIENCE

Apr. 1983-Jun. 1987:

Teacher of English as a Second Language, at División del Norte, San Ángel and Puebla branches of "Interlingua", property of "Idiomas S.A.". Génova # 33-105. Colonia Juárez. México City

Aug. 1987-Dec. 2007:

Part time teacher at the School of Electronic Engineering and Communications, Universidad de las Américas, Sta. Catarina Mártir, Cholula, Puebla, México.

Dec. 1988-Dec. 1991:

Associate Researcher "B", National Institute for Research in Astrophysics, Optics and Electronics, Tonantzintla, Puebla. December 1 1988 to December 15 1991.

Dec. 1991 to Oct. 1999:

Associate Researcher "C", National Institute for Research in Astrophysics, Optics and Electronics, Tonantzintla, Puebla. December 16 1991 to date.

Aug. 1994-Aug. 1995:

Visiting Researcher at the "Interuniversitair Micro-Elektronica Centrum" (IMEC) in Heverlee, Belgium. August 23 1994 to August 15 1995.

Nov. 1999 to May 2005:

Full Researcher "A", National Institute for Research in Astrophysics, Optics and Electronics, Tonantzintla, Puebla. November 1 1999 to May 31 2005.

Feb. 2001 to March 2006:

Chairman of Graduate Studies, National Institute for Research in Astrophysics, Optics and Electronics, Tonantzintla, Puebla. February 16 2001 to March 15 2006.

June 2005 to July 2017:

Full Researcher “B”, National Institute for Research in Astrophysics, Optics and Electronics, Tonantzintla, Puebla. June 1st, 2005 to July 31, 2017. Tenured.

March 2006 to December 2013:

Academic Dean, National Institute for Research in Astrophysics, Optics and Electronics, Tonantzintla, Puebla. March 16, 2006 to December 31, 2013.

January 2014 to February 2016:

Director of Research, National Institute for Research in Astrophysics, Optics and Electronics, Tonantzintla, Puebla. January 1st, 2014 to February 29, 2016.

August 2017 to date:

Full Researcher “C”, National Institute for Research in Astrophysics, Optics and Electronics, Tonantzintla, Puebla. August 1st, 2017 to date. Tenured.

August 2020 to June 7, 2023:

Head of the Electronics Department, National Institute for Research in Astrophysics, Optics and Electronics, Tonantzintla, Puebla. August 12, 2020 to June 7, 2023.

4.- SUMMARY OF ACADEMIC ACTIVITIES

Articles in periodic journals	54
Articles in conference proceedings	95
Summaries in conference proceedings	31
Technical reports	5
General interest articles	27
Theses and chapters in books	6
Citations	501
Directed theses:	39
Doctoral	13
Master's	23
Bachelor's	3
Taught undergraduate courses	37
Taught graduate courses	111
Presentations in conferences	160

MOST RECENT PUBLICATIONS:

“Educational implementation of lookup tables for special functions on microcontroller PIC”, M.A. Sandoval-Hernández, H. Vázquez-Leal, H. Jiménez-Islas, R.S. Murphy-Arteaga, G.C. Velez-López, U.A. Filobello-Niño, G.J. Morales-Alarcón, V.M. Jiménez-Fernández, *Acta Universitaria*, 36, e4298, February 2026, pp. 1-28. DOI:10.15174/au.2026.4298

“A Two-Step Method for Diode Package Characterization based on Small Signal Behavior Analysis”, H.A. Cárdenas-Herrera, R.S. Murphy-Arteaga, *Technologies*, Vol. 13, 581, December 2025, pp. 1-23. DOI:10.3390/technologies13120581

“An area-efficient 1st order noise shaping SAR using C-2C ladder DAC for biomedical applications”, M. Velázquez-Díaz, V.R. González-Díaz, G. De la Fuente-Cortés, G. Espinosa-Flores-Verdad, R.S. Murphy-Arteaga, *Integration, the VLSI Journal*, 107, November 2025, pp. 1-9. DOI: 10.1016/j.vlsi.2025.102598

“High-Gain Three-Element Series-Fed Antenna for Millimeter-Wave 5G Applications”, V.A. Esquinca-García, R. Murphy, *IEEE Latin America Transactions*, Vol. 23, No. 9, September 2025, pp. 822-827. DOI: 10.1109/TLA.2025.11119487

“On-chip CMOS power meter for solar cell Maximum Power Point Tracking”, G. De La Fuente-Cortés, L.E. Morales-Aguilar, V.R. González-Díaz, S.E. Maya-Rueda, G. Mino-Aguilar, J.F. Guerrero-Castellanos, R.S. Murphy-Arteaga, *IEEE Access*, Vol. 12, October 2024, pp. 142799-142808. DOI:10.1109/ACCESS.2024.3469934

“An Improved Method to Measure, Characterize, and Model Microstrip Antennas in the W Band”, R. Murphy-Arteaga, E. Colín-Beltrán, M.T. Serrano-Serrano, C. Nwachukwu, S.C. Sejas-García, R. Torres-Torres, *Instrumentation & Measurement Magazine*, Vol. 27, No. 2, April 2024, pp. 53-58. DOI:10.1109/MIM.2024.10472981

“Identifying and Modeling Resonance-Related Fluctuations on the Experimental Characteristic Impedance for PCB and On-Chip Transmission Lines”, Y. Rodríguez, R. Torres, R. Murphy, *Electronics*, Vol. 12, 2994, July 2023, pp. 1-10. DOI: 10.3390/electronics12132994

“Dual-Band Antenna on 3D-Printed Substrate for 2.4/5.8 GHz ISM-Band Applications”, K. Olan, R. Murphy, *Electronics*, Vol. 12, 2368, May 2023, pp. 1-13. DOI: 10.3390/electronics12112368

5.-ARTICLES IN PERIODIC JOURNALS

- 1991** **5.01** “Die-Punch Test Study and Relationship to Delta V_{BE} ”, M. Aceves, L. Paredes, R. Murphy. IEEE Transactions on Components, Hybrids and Manufacturing Technology, Vol. 14, No. 4, December 1991, pp. 900-903.
- 5.02** “Caracterización de un Proceso de Fabricación de Circuitos Integrados CMOS” (*Characterization of a CMOS Integrated Circuit Fabrication Process*), M. Linares, R. Murphy, W. Calleja. Ingeniería Electrónica Automática y Comunicaciones, Havana, Cuba, Vol. XII, No. 3, 1991, pp. 3-16.
- 1992** **5.03** “Applying Statistics to Find the Causes of Variability in Aluminum Evaporation: A case Study”, M. Aceves, L.A. Hernández, R. Murphy, IEEE Transactions on Semiconductor Manufacturing, Vol. 5, No. 2, May 1992, pp. 165-167.
- 5.04** “Fabricación de Circuitos Integrados en México” (*Fabrication of Integrated Circuits in México*), S. Fuentes, M. Aceves, R. Murphy, W. Calleja, M. Linares, Revista Ciencia, Vol. 43, No. 2, June 1992, pp. 127-156.
- 1993** **5.05** “Cuantificación del Gammagrama de Vaciamiento Gástrico en Voluntarios Sanos y Pacientes de la Ciudad de México” (*Quantification of the Gastric Emptying Gammagram in Healthy Volunteers and Patients in México City*), C. Manzano, C. Arteaga, R. Murphy, L. Uscanga, L. Morales, F. Mayén, Acta Médica, Vol. XXIX, No. 115-116, July-December 1993, pp. 47-58.
- 1995** **5.06** “Quality Assurance in Polysilicon Deposition Using Statistics”, M. Aceves, R. Murphy, A. Torres, W. Calleja, Quality Engineering, Vol. 8, No. 2, December 1995, pp. 255-262.
- 1999** **5.07** “RF Low-Noise Amplifier in BICMOS Technologies”, F. Carreto, J. Silva, R. Murphy, IEEE Transactions on Circuits and Systems, July 1999, pp. 974-977.
- 2001** **5.08** “A 77K MOS Magnetic Field Detector (Split-Drain MAGFET)”, R. Murphy, P. García, E. Gutiérrez, A. Torres, Revista Mexicana de Física, Vol. 47, No. 6, December 2001, pp. 558-561.
- 5.09** “Fabricación y Caracterización de Inductores sobre Silicio” (*Fabrication and Characterization of Inductors on Silicon*), J. Huerta, R. Murphy, A. Díaz, A. Torres, W. Calleja, M. Landa, Superficies y Vacío, Vol. 13, December 2001, pp. 44-49.

- 2003** **5.10** “MOSFET Gate Resistance Determination”, R. Torres, R. Murphy, S. Decoutere, *Electronics Letters*, Vol. 39, No. 2, January 2003, pp. 248-250.
- 5.11** “Fabrication, Characterisation and Modelling of Integrated On-Silicon Inductors”, R. Murphy, J. Huerta, A. Díaz, A. Torres, W. Calleja, M. Landa, *Microelectronics Reliability*, Vol. 43, No. 2, February 2003, pp. 195-201.
- 5.12** “MOSFET Bias Dependent Series Resistance Extraction from RF Measurements”, R. Torres, R. Murphy, S. Decoutere, *Electronics Letters*, Vol. 39, No. 20, October 2003, pp. 1476-1478.
- 2004** **5.13** “Electrical Characterization of n-type a-SiGe:H/p-type Crystalline-Silicon Heterojunctions”, P. Rosales, A. Torres, R. Murphy, M. Landa, *Semiconductor Science and Technology*, Vol. 19, No. 3, March 2004, pp. 366-372.
- 5.14** “An Improved Substrate-Loss Model to Determine MOSFET Drain, Source and Substrate Elements”, R. Torres, R. Murphy, A. Torres, *Microwave and Optical Technology Letters*, Vol. 43, No. 2, October 20 2004, pp. 126-130. DOI: 10.1002/mop.20397
- 2005** **5.15** “Influence of the a-SiGe:H Thickness on the Conduction Mechanisms of n-amorphous-SiGe:H/p-Crystalline Heterojunction Diodes”, P. Rosales, A. Torres, R. Murphy, J. De la Hidalga, L. Marsal, R. Cabré, J. Pallarés, *Journal of Applied Physics*, Vol. 97, No. 8, April 2005, pp. 083710-1-083710-8.
- 5.16** “Enabling a Compact Model to Simulate the RF Behavior of MOSFETs in SPICE”, R. Torres, R. Murphy, *International Journal of RF and Microwave Computer-Aided Engineering*, Vol. 15, No. 3, May 2005, pp. 255-263.
- 5.17** “Analytical Model and Parameter Extraction to Account for the Pad Parasitics in RF-CMOS”, R. Torres, R. Murphy, A. Reynoso, *IEEE Transactions on Electron Devices*, Vol. 52, No. 7, July 2005, pp. 1335-1342. DOI: 10.1109/TED.2005.850644
- 5.18** “Two MOS Transimpedance Amplifier On-Chip Structures for High-Frequency Applications”, J. Martínez, A. Díaz, A. Torres, R. Murphy, J. Finol, *Ingeniería Electrónica Automática y Comunicaciones*, Havana, Cuba, Vol. XXVI, No. 2, December 2005, pp. 3-8.
- 2008** **5.19** “Analytical Characterization and Modeling of Shielded Test Structures for RF-CMOS”, E. Torres, R. Torres, R. Murphy, E. Gutiérrez, *International Journal of High Speed Electronics and Systems*, Vol. 18, No. 4, December 2008, pp.793-803.

- 2010** **5.20** “Exploiting magnetic sensing capabilities of Short Split-Drain MAGFETs”, G. Santillán, V. Champac, R. Murphy, *Solid State Electronics*, Vol. 54, No. 11, November 2010, pp.1239-1245. DOI: 10.1016/j.sse.2010.06.016
- 2011** **5.21** “Using S-parameter measurements to determine the threshold voltage, gain factor, and mobility degradation factor for microwave bulk-MOSFETs”, G. Álvarez, R. Torres, R. Murphy, *Microelectronics Reliability*, Vol. 51, No. 2, February 2011, pp. 342-349. DOI: 10.1016/j.microrel.2010.09.001
- 2012** **5.22** “Modeling Transmission Lines on Silicon in the Frequency- and Time-Domains from S-parameters”, S. Sejas, R. Torres, R. Murphy, *IEEE Transactions on Electron Devices*, Vol. 59, No. 6, June 2012, pp. 1803-1806. DOI: 10.1109/TED.2012.2189774
- 5.23** “On the Origin of Light Emission in Silicon Rich Oxide Obtained by Low-Pressure Chemical Vapor Deposition”, M. Aceves, A. González, R. López, A. Luna, D. Berman, A. Morales, C. Falcony, C. Domínguez, R. Murphy, *Journal of Nanomaterials*, Vol. 2012, July 2012, pp. 1-11. DOI: 10.1155/2012/890701
- 5.24** “A New Analytical Method for Calculating the Characteristic Impedance Z_c of Uniform Transmission Lines”, J. Zúniga, A. Reynoso, C. Maya, R. Murphy, *Computación y Sistemas*, Vol. 16, No. 3, July-September 2012, pp. 277-285.
- 2013** **5.25** “Small Antenna Based on MEMS and Metamaterial Properties for Reconfigurable Applications”, G. Rosas, R. Murphy, W. Moreno, *International Journal of Antennas and Propagation*, Vol. 2013, January 2013, pp. 1-10. DOI: 10.1155/2013/498176
- 5.26** “Characterization of RF-MOSFETs in Common-Source Configuration at Different Source-to-Bulk Voltages from S-Parameters”, F. Zárate, G. Álvarez, R. Torres, R. Murphy, S. Decoutere, *IEEE Transactions on Electron Devices*, Vol. 60, No. 8, August 2013, pp. 2450-2456. DOI: 10.1109/TED.2013.2264724
- 5.27** “Modeling and Parameter Extraction of Test Fixtures for MOSFET On-Wafer Measurements up to 60 GHz”, G. Álvarez, R. Torres, R. Murphy, *International Journal of RF and Microwave Computer-Aided Engineering*, Vol. 36, No. 6, November 2013, pp. 655-661. DOI: 10.1002/mmce.20701
- 2014** **5.28** “Modeling the Impact of Multi-Fingering Microwave MOSFETs on the Source and Drain Resistances”, F. Zárate, R. Murphy, R. Torres, A. Ortiz, F. García, *IEEE Transactions on Microwave Theory and Techniques*, Vol. 62, No. 12, December 2014, pp. 3255-3261. DOI 10.1109/TMTT.2014.2366105

- 2015** **5.29** “Flipped Voltage Follower based Low-Noise Amplifier with 640 MHz BW at 2.26 GHz, 1.3 dB NF, 1.2 V V_{dd} , and up to 10 dBm IIP3”, F. Trejo-Macotela, L. Sánchez-Gaspariano, C. Muñiz-Montero, A. Díaz-Sánchez, R. Murphy-Arteaga, A. García-Barrientos, J. Rocha-Pérez, *Indian Journal of Pure & Applied Physics*, Vol. 53, No. 8, August 2015, pp. 546-552.
- 5.30** “Consistent Modeling and Power Gain Analysis of Microwave SiGe HBTs in CE and CB Configurations”, G. Álvarez, R. Torres, R. Murphy, *IEEE Transactions on Microwave Theory and Techniques*, Vol. 63, No. 12, December 2015, pp. 3888-3895. DOI: 10.1109/TMTT.2015.2496375
- 5.31** “Consistent DC and RF MOSFET Modeling Using an S-Parameter Measurement-Based Parameter Extraction Method in the Linear Region”, F. Zárate, R. Torres, R. Murphy, *IEEE Transactions on Microwave Theory and Techniques*, Vol. 63, No. 12, December 2015, pp. 4255-4262. DOI: 10.1109/TMTT.2015.2495363
- 2016** **5.32** “Characterization of Hot-Carrier-Induced RF-MOSFET Degradation at Different Bulk Biasing Conditions From S-Parameters”, F. Zárate, D. García, V. Vega, R. Torres, R. Murphy, *IEEE Transactions on Microwave Theory and Techniques*, Vol. 64, No. 1, January 2016, pp. 125-132. DOI: 10.1109/TMTT.2015.2504090
- 5.33** “A DC Method to Extract Mobility Degradation and Series Resistance of Multifinger Microwave MOSFETs”, A. Sucre, F. Zárate, A. Ortiz, R. Torres, F. García, J. Muci, R. Murphy, *IEEE Transactions on Electron Devices*, Vol. 63, No. 5, May 2016, pp. 1821-1826. DOI: 10.1109/TED.2016.2538778
- 5.34** “Tunable Matching Network for Accurate Impedance Measurement of On-Chip and PCB Millimeter-Wave Antennas”, L.K. Sandoval, R. Murphy, *Microwave and Optical Technology Letters*, Vol. 58, No. 10, October 2016, pp. 2516-2518. DOI: 10.1002/mop.30083
- 5.35** “Conductance-to-Current-Ratio-Based Parameter Extraction in MOS Leakage Current Models”, A. Ortiz, A. Sucre, R. Torres, J. Molina, R. Murphy, F. García, *IEEE Transactions on Electron Devices*, Vol. 63, No. 10, October 2016, pp. 3844-3850. DOI: 10.1109/TED.2016.2597964
- 2017** **5.36** “A review of DC extraction methods for MOSFET series resistance and mobility degradation model parameters”, A. Ortiz, A. Sucre, F. Zárate, R. Torres, R. Murphy, J.J. Liou, F. García, *Microelectronics Reliability*, Vol. 69, February 2017, pp. 1-16. DOI: 10.1016/j.microrel.2016.12.016

- 5.37** “Development of Thick Film, CMOS Compatible Planar Millimetre-Wave Antenna for Antennas in Package Applications”, L.K. Sandoval, R. Murphy, *Microsystem Technologies*, Vol. 23, No. 7, July 2017, pp. 2927-2930. DOI: 10.1007/s00542-016-3084-z
- 2019** **5.38** “Modeling Ground-Shielded Integrated Inductors Incorporating Frequency-Dependent Effects and Considering Multiple Resonances”, J. Valdés, R. Torres, R. Murphy, G. Álvarez, *IEEE Transactions on Microwave Theory and Techniques*, Vol. 67, No. 4, April 2019, pp. 1370-1378. DOI: 10.1109/TMTT.2019.2895579
- 2020** **5.39** “Wideband Dual-Mode Microstrip Resonators as IF Filters in a K-Band Wireless Transceiver”, L. Rodríguez, C. Gutiérrez, R. Murphy, J. Meza, J. Torres, *Microwave and Optical Technology Letters*, Vol. 62, No. 2, February 2020, pp. 606-614. DOI: 10.1002/mop.32066
- 5.40** “Miniature Patch and Slot Microstrip Arrays for IoT and ISM Band Applications”, K. Olan, R. Murphy, E. Colín, *IEEE Access* Vol. 8, May 2020, pp. 102846-102854. DOI: 10.1109/ACCESS.2020.2998739
- 2021** **5.41** “Determination of the Contribution of the Ground-Shield Losses to the Microwave Performance of On-Chip Coplanar Waveguides”, J. Valdés, R. Murphy, R. Torres, *IEEE Transactions on Microwave Theory and Techniques*, Vol. 69, No. 3, March 2021, pp. 1594-1601. DOI: 10.1109/TMTT.2021.3053548
- 5.42** “Assessment of through-silicon-vias with different configurations of ground vias and accounting for substrate losses”, Y. Rodríguez, R. Murphy, R. Torres, *International Journal of RF and Microwave Computer-Aided Engineering*, July 2021, pp. 1-9. DOI: 10.1002/mmce.22811
- 2022** **5.43** “A novel metamaterial-based antenna for on-chip applications for the 72.5-81 GHz frequency range”, K. Olan, R. Murphy, *Scientific Reports*, Vol. 12, February 2022, pp. 1-9. DOI: 10.1038/s41598-022-05829-0
- 5.44** “A Novel and Compact Slotted-Decahedral Antenna for Millimeter-Wave 5G Devices”, K. Olan, R. Murphy, *Electronics*, Vol. 11, No. 12, 1813, June 2022, pp. 1-13. DOI: 10.3390/electronics11121813
- 5.45** “Modeling Microwave Connectors Used as Signal Launchers for Microstrip Lines of Different Widths”, Y. Rodríguez, R. Murphy, R. Torres, *IEEE Microwave and Wireless Components Letters*, Vol. 32, No. 7, July 2022, pp. 1-9. DOI: 10.1109/LMWC.2022.3179927

- 5.46** “Enhanced Monopole Antenna for On-Chip E-Band Application”, K. Olan, R. Murphy, *URSI Radio Science Letters*, Vol. 4, December 2022, pp. 1-5. DOI: 10.46620/22-0018
- 2023** **5.47** “Dual-Band Antenna on 3D-Printed Substrate for 2.4/5.8 GHz ISM-Band Applications”, K. Olan, R. Murphy, *Electronics*, Vol. 12, 2368, May 2023, pp. 1-13. DOI: 10.3390/electronics12112368
- 5.48** “Identifying and Modeling Resonance-Related Fluctuations on the Experimental Characteristic Impedance for PCB and On-Chip Transmission Lines”, Y. Rodríguez, R. Torres, R. Murphy, *Electronics*, Vol. 12, 2994, July 2023, pp. 1-10. DOI: 10.3390/electronics12132994
- 2024** **5.49** “An Improved Method to Measure, Characterize, and Model Microstrip Antennas in the W Band”, R. Murphy, E. Colín-Beltrán, M.T. Serrano-Serrano, C. Nwachukwu, S.C. Sejas-García, R. Torres-Torres, *Instrumentation & Measurement Magazine*, Vol. 27, No. 2, April 2024, pp. 53-58. DOI:10.1109/MIM.2024.10472981
- 5.50** “On-chip CMOS power meter for solar cell Maximum Power Point Tracking”, G. De La Fuente-Cortés, L.E. Morales-Aguilar, V.R. González-Díaz, S.E. Maya-Rueda, G. Mino-Aguilar, J.F. Guerrero-Castellanos, R.S. Murphy-Arteaga, *IEEE Access*, Vol. 12, October 2024, pp. 142799-142808. DOI:10.1109/ACCESS.2024.3469934
- 2025** **5.51** “High-Gain Three-Element Series-Fed Antenna for Millimeter-Wave 5G Applications”, V.A. Esquinca-García, R. Murphy, *IEEE Latin America Transactions*, Vol. 23, No. 9, September 2025, pp. 822-827. DOI: 10.1109/TLA.2025.11119487
- 5.52** “An area-efficient 1st order noise shaping SAR using C-2C ladder DAC for biomedical applications”, M. Velázquez-Díaz, V.R. González-Díaz, G. De la Fuente-Cortés, G. Espinosa-Flores-Verdad, R.S. Murphy-Arteaga, *Integration, the VLSI Journal*, 107, November 2025, pp. 1-9. DOI: 10.1016/j.vlsi.2025.102598
- 5.53** “A Two-Step Method for Diode Package Characterization based on Small Signal Behavior Analysis”, H.A. Cárdenas-Herrera, R.S. Murphy-Arteaga, *Technologies*, Vol. 13, 581, December 2025, pp. 1-23. DOI:10.3390/technologies13120581
- 2026** **5.54** “Educational implementation of lookup tables for special functions on microcontroller PIC”, M.A. Sandoval-Hernández, H. Vázquez-Leal, H. Jiménez-Islas, R.S. Murphy-Arteaga, G.C. Velez-López, U.A. Filobello-Niño, G.J. Morales-Alarcón, V.M. Jiménez-Fernández, *Acta Universitaria*, 36, e4298, February 2026, pp. 1-28. DOI:10.15174/au.2026.4298

6.- ARTICLES IN CONFERENCE PROCEEDINGS

- 1989** **6.001** “Estructuras de Prueba y Técnicas de Medición de Parámetros en la Fabricación de Circuitos Integrados CMOS en el INAOE” (*Test Structures and Measurement Techniques in the Fabrication of CMOS Integrated Circuits at the INAOE*), M. Linares, R. Murphy, M. Aceves, Proceedings of the V Seminar on Physical Electronics, México, D.F., August 1989, pp. 81-85, 1989.
- 6.002** “Caracterización del Proceso de Fabricación de Circuitos Integrados del INAOE” (*Characterization of the Integrated Circuit Fabrication Process at the INAOE*), R. Murphy, M. Linares, M. Aceves, Proceedings of the V Seminar on Physical Electronics, México City, México, August 1989, pp. 86-88.
- 1990** **6.003** “Un Proceso CMOS de Nueve Niveles” (*A Nine Level CMOS Process*), R. Murphy, Proceedings of the Electronics and Communications Conference UDLA-P-90. Universidad de las Américas, Puebla, February 1990, pp. 5.5-5.8, 1990.
- 6.004** “Oscilador de Anillo Integrado CMOS” (*Integrated CMOS Ring Oscillator*), M. Linares, R. Murphy, W. Calleja, S. Fuentes, M. Aceves, Proceedings of ELECTRO-90, Chihuahua, México, October 1990, pp. 473-485.
- 6.005** “Generación de Mascarillas para Circuitos Integrados” (*Integrated Circuit Mask Generation*), R. Murphy, M. Linares, T. León, T. Flores, Proceedings of ELECTRO-90, Chihuahua, México, October 1990, pp. 487-492.
- 1991** **6.006** “Control de Calidad en el Proceso ECMOS-1” (*Quality Control in the ECMOS-1 Process*), M. Aceves, M. Linares, R. Murphy, W. Calleja, I. Zaldívar, Proceedings of ELECTRO-91, Chihuahua, México, October 1991, pp. 807-820.
- 6.007** “Fabricación de Celdas Digitales Estándard CMOS y su Aplicación en Circuitos Integrados” (*Fabrication of CMOS Standard Cells and their Application in Integrated Circuits*), M. Linares, S. Fuentes, I. Zaldívar, R. Murphy, W. Calleja, J. Remolina, M. Landa, Proceedings of ELECTRO-91, Chihuahua, México, October 1991, pp. 857-872
- 6.008** “Métodos Estadísticos para la Optimización de Procesos: Un Ejemplo” (*Statistical Methods to Optimize Processes: An Example*), M. Aceves, R. Murphy, I. Fuentes, I. Zaldívar, Proceedings of ELECTRO-91, Chihuahua, México, October 1991, pp. 879-893.

- 1992** **6.009** “Diseño de Celdas Básicas Digitales y Analógicas MOS para la Construcción de Filtros a Capacitores Conmutados” (*The Design of Basic Analog and Digital Cells for the Construction of Switched-Capacitor Filters*), F. Sandoval, R. Murphy, S. Fuentes, Proceedings of the III International Conference on Electronics, Communications and Computers (CONIELECOM UDLA'92). Universidad de las Américas, Puebla, February 1992, pp. 6.9-6.18.
- 6.010** “Diseño de un Dispositivo para Compensación de Pérdida Auditiva” (*Design of a Device to Compensate for Hearing Loss*), F. Sandoval, R. Murphy, M. Landa, I. Zaldívar, Proceedings of ELECTRO-92, Chihuahua, México, October 1992, pp. 527-541.
- 6.011** “Polisilicio LPCVD para Aplicaciones en Microelectrónica: Una Revisión” (*LPCVD Polysilicon for Applications in Microelectronics: A Review*), R. Murphy, A. Torres, M. Aceves, Proceedings of ELECTRO-92, Chihuahua, México, October 1992, pp. 559-566.
- 1993** **6.012** “Cuantificación del Gammagrama de Vaciamiento Gástrico en Voluntarios Sanos y Pacientes de la Ciudad de México” (*Quantification of the Gastric Emptying Gammagram in Healthy Volunteers and Patients in México City*), C. Manzano, C. Arteaga, R. Murphy, L. Uscanga, L. Morales, F. Mayén, Proceedings of the XXVII Conference of the Mexican Society of Nuclear Medicine, Ajijic, Jalisco, México, May 1993, pp. 88-109.
- 1994** **6.013** “The Use of Statistical Methods to Insure the Quality and Optimization of Polysilicon Deposition”, M. Aceves, R. Murphy, A. Torres, W. Calleja, 1993 International Integrated Reliability Workshop Final Report, IEEE, NJ., USA, March 1994, pp. 105-112.
- 1995** **6.014** “Characterisation of the Overlap Capacitance of Submicron LDD MOSFETs”, V. Kol'dyaev, A. Clerix, R. Murphy, L. Deferm, Proceedings of the 1995 European Solid State Device Research Conference (ESSDERC 1995), September 1995, pp. 757-760.
- 1996** **6.015** “Sobre la Caracterización en Alta Frecuencia de Transistores MOS” (*On the High-Frequency Characterization of MOS Transistors*), R. Murphy, E. Gutiérrez, Proceedings of the VI International Conference on Electronics, Communications and Computers (CONIELECOM UDLA'96), February 1996, pp. 23-27.
- 1997** **6.016** “Analyses of the Series Resistance and Effective Channel Length Extraction of Submicron MOS Transistors Operating at High Temperature”, A.S. Nicollet, J.A. Martino, E.A. Gutiérrez, R. Murphy, Proceedings of the XII Conference of the Brazilian Microelectronics Society, September 1997, pp. 1-4.

- 1998** **6.017** “Characterization of the Submicron MOS Transistor for High-Frequency Applications”, R. Murphy, E. Gutiérrez, Proceedings of the 8th International Conference of Electronics, Communications and Computers, (CONIELECOMP 98), February 1998, pp. 344-350.
- 6.018** “Electron Transport Through Accumulation Layers and its Effect on the Series Resistance of MOS Transistors”, E. Gutierrez., O. Gonzalez., R. Murphy, Proceedings of the Second IEEE International Caracas Conference on Devices, Circuits and Systems, March 1998, pp. 51-54.
- 6.019** “Modelado de Circuitos Integrados CMOS” (*Modeling of CMOS Integrated Circuits*), R. Murphy, Proceedings of the First Updating Conference on Electronics, Communications and Computer Science, CAIECC’98, March 1998, pp. 36-41.
- 6.020** “A Sub-mT Cryogenic Silicon Magnetic Sensor”, E. Gutiérrez, R. Murphy, A. Torres, M. Linares, P. García, R. Rojas, V.H. Páez, Proceedings of the 1998 European Solid State Device Research Conference (ESSDERC 1998), September 1998, pp. 188-191.
- 6.021** “A Straightforward De-Embedding Technique for High-Frequency Measurements of MOS Transistors”, R. Murphy, E. Gutiérrez, Proceedings of the 2nd International Conference on Research in Electrical and Electronics Engineering, September 1998, pp. 1-5.
- 6.022** “Carrier Deflection at the Surface of a MOS Transistor Under the Influence of a Magnetic Field”, P. García, R. Murphy, E. Gutiérrez, Digest of the 1998 Workshop on Simulation and Characterization Techniques in Semiconductors, September 1998, pp. 37-39.
- 1999** **6.023** “Impedancia de Líneas de Polisilicio” (*Impedance of Polysilicon Lines*), R. Murphy, Proceedings of the IX International Conference on Electronics, Communications and Computers (CONIELECOMP 99), March 1999, pp. 105-109.
- 6.024** “Temperature Dependence of a Split—Drain MAGFET”, P. García, R. Murphy, E. Gutiérrez, Proceedings of the IX International Conference on Electronics, Communications and Computers (CONIELECOMP 99), March 1999, pp. 152-155.
- 6.025** “Experimental and Theoretical Study of a MAGFET at Room and Low Temperatures”, P. García, R. Murphy, E. Gutiérrez, Proceedings of the V International Iberchip Workshop, March 1999, pp. 247-249.

- 6.026** “Deflección de Portadores en la Superficie de un Transistor MOS Bajo la Influencia de un Campo Magnético” (*Deflection of Carriers on the Surface of a MOS Transistor under the Influence of a Magnetic Field*), P. García, R. Murphy, E. Gutiérrez, A. Ramos, Proceedings of the IX Interuniversity Conference on Electronics, Computers and Electricity (CIECE’99), March 1999, pp. 1-4.
- 6.027** “Análisis de Líneas de Interconexión de Polisilicio para Circuitos Integrados CMOS” (*Analysis of Polysilicon Interconnect Lines for CMOS Integrated Circuits*), R. Murphy, Proceedings of the First International Conference on Electronics, Communications and Computers (CIECC’99), March 1999, pp. 24-27.
- 6.028** “Performance of 0.5 μm nMOS Transistors at 200°C”, R. Murphy, E. Gutiérrez, Digest of the 1999 Workshop on Simulation and Characterization Techniques in Semiconductors, September 1999, pp. 38-41.
- 2000** **6.029** “Circuitos Integrados CMOS para Comunicaciones Inalámbricas: Lineamientos de Diseño, Fabricación y Simulación” (*CMOS Integrated Circuits for Wireless Communications: Guidelines for the Design, Fabrication and Simulation*), R. Murphy, Proceedings of the X International Conference on Electronics, Communications and Computers (CONIELECOMP 2000), March 2000, pp. 451-455.
- 6.030** “Simulación de Circuitos Integrados CMOS para Aplicaciones en Altas Frecuencias Usando SPICE” (*Simulation of CMOS Integrated Circuits for High Frequency Applications using SPICE*), R. Murphy, Proceedings of the X International Conference on Electronics, Communications and Computers (CONIELECOMP 2000), March 2000, pp. 389-392.
- 6.031** “The Subthreshold-to-Linear Transition in Submicron MOSFETs at High Temperature”, E. Gutiérrez, R. Murphy, Proceedings of the Third International IEEE Caracas Conference on Devices, Circuits and Systems (ICDCS2000), March 2000, pp. D40-1-D40-4.
- 6.032** “Interaction of Electrons with a Magnetic Field in Si at 77K”, P. García, E. Gutiérrez, R. Murphy, Proceedings of the Fourth European Workshop on Low Temperature Electronics –Wolte 4, June 2000, pp. 277-282.

- 2001** **6.033** “Método Alternativo para la Determinación de la Longitud Efectiva del Canal y la Resistencia Serie de un TMOS LDD” (*An alternative Method to Determine Effective Length and Series Resistance of LDD MOSFET’s*), R. Murphy, R. Torres, Proceedings of the XI International Conference on Electronics, Communications and Computers (CONIELECOMP 2001), February 2001, pp. 232-237.
- 6.034** “A MAPLE-Based Homotopic Circuit Simulation Package” A. Sarmiento, R. Murphy, H. Vázquez, Proceedings of the IEEE Midwest Symposium on Circuits and Systems (MWSCAS 2001), August 2001, pp. 33-36.
- 2002** **6.035** “Inductores Integrados en Silicio para Aplicaciones de Radio Frecuencia” (*Integrated Inductors in Silicon for Radio Frequency Applications*) J. Huerta, R. Murphy, A. Díaz, A. Torres, Proceedings of the XII International Conference on Electronics, Communications and Computers (CONIELECOMP 2002), February 2002, pp. 134-138.
- 6.036** “Analysis of a Silicon Magnetic Sensor at 77K” P. García, R. Murphy, E. Gutiérrez, Proceedings of the VIII International Iberchip Workshop, (IBERCHIP 2002), April 2002, pp. SSSSDMIII-1-SSSSDMIII-5.
- 6.037** “Fabricación y Caracterización de Inductores sobre Silicio” (*Fabrication and Characterization of Inductors on Silicon*), J. Huerta, A. Díaz, A. Torres, R. Murphy, W. Calleja, M. Landa, Proceedings of the VIII International Iberchip Workshop, (IBERCHIP 2002), April 2002, pp. p10-1-p10-6.
- 6.038** “An Alternative Method to Determine Effective Channel Length and Parasitic Series Resistance of LDD MOSFET’s”, R. Torres, R. Murphy, Proceedings of the Fourth IEEE International Caracas Conference on Devices, Circuits and Systems (ICDCS2002), April 2002, pp. D011-1-D011-5.
- 6.039** “Consequence of the Coupled Variables in Homotopic Simulation of Nonlinear Resistive Circuits”, H. Vázquez, L. Hernández, A. Sarmiento, R. Murphy, Proceedings of the Fourth IEEE International Caracas Conference on Devices, Circuits and Systems (ICDCS2002), April 2002, pp. C014-1-C014-4.
- 6.040** “Consequence of Coupled Variables in the Homotopic Simulation of BJT Circuits”, H. Vázquez, L. Hernández, A. Sarmiento, R. Murphy, Proceedings of the 2002 IEEE International Symposium on Circuits and Systems (ISCAS 2002), May 2002, pp. II-241-II-244.

- 2003**
- 6.041** “Modelado del Transistor MOS para Aplicaciones de RF Utilizando BSIM 3V3” (*Modeling the MOS Transistor for RF Applications using BSIM 3V3*), R. Torres, R. Murphy, Proceedings of the XIII International Conference on Electronics, Communications and Computers (CONIELECOMP 2003), February 2003, pp. 16-19.
- 6.042** “Modelado de la Capacitancia Parásita de Compuerta de un TMOS LDD” (*Modeling the Parasitic Gate Capacitance of an LDD MOST*) L. Ortega, R. Murphy, Proceedings of the XIII International Conference on Electronics, Communications and Computers (CONIELECOMP 2003), February 2003, pp. 76-79.
- 6.043** “Procedimiento de Diseño para Antenas de Microstrip e Independientes de Frecuencia” (*Design Procedure for Microstrip and Frequency Independent Antenas*), G. Rosas, R. Murphy, Proceedings of the International Conference on Devices, Circuits and Systems Veracruz 2003 (CIDCS Ver 2003), June 2003, pp. 1-6.
- 6.044** “Enabling a Compact Model for MOSFET DC and Radio-Frequency Simulations in SPICE” R. Torres, R. Murphy, Proceedings of the International Conference on Devices, Circuits and Systems Veracruz 2003 (CIDCS Ver 2003), June 2003, pp. 1-5.
- 6.045** “Improving Multi-Parameter Homotopy via Symbolic Analysis Techniques for Circuit Simulation” H. Vázquez, L. Hernández, A. Sarmiento, R. Murphy, Proceedings of the European Conference on Circuit Theory and Design (ECCTD'03), September 2003, pp. II-402-II-405.
- 6.046** “Impact of technology scaling on the input and output features of RF-MOSFETs: effects and modeling”, R. Torres, R. Murphy, E. Augendre, S. Decoutere, Proceedings of the European Solid State Devices Research Conference (ESSDERC 2003), September 2003, pp. 295-298.
- 2004**
- 6.047** “Laboratorios Remotos para la Educación a Distancia en Electrónica” (*Remote Laboratories for Distance Education in Electronics*), R. Murphy, Proceedings of the 4th International Conference on Higher Education (UNIVERSIDAD 2004), February 2004, pp. POS048-1-POS048-5 (4489-4493).
- 6.048** “Bi-CMOS Opto-Electronic Reception System for Application in High-Frequencies”, J. Martínez, A. Díaz, A. Torres, R. Murphy, J. Finol, Proceedings of the XIV International Conference on Electronics, Communications and Computers (CONIELECOMP 2004), February 2004, pp. 214-219.

- 6.049** “Design and Characterization of Two MOS Transimpedance Amplifier Structures for High-Frequency Applications”, J. Martínez, A. Díaz, A. Torres, R. Murphy, J. Finol, Proceedings of the X International Iberchip Workshop, March 2004, pp. 604-608.
- 6.050** “Straightforward Determination of Small-Signal Model Parameters for Bulk RF-MOSFETs”, R. Torres, R. Murphy, Proceedings of the Fifth IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDCS2004), November 2004, pp. 14-18.
- 6.051** “Linearity in Two Optical Receiver Structures for High-Frequency Applications”, J. Martínez, A. Díaz, R. Murphy, J. Finol, Proceedings of the Fifth IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDCS2004), November 2004, pp. 126-129.
- 6.052** “Effects of the Low Temperature Annealing on the Transport Mechanisms in n-type a-SiGe:H/p-type c-Silicon Heterojunctions”, P. Rosales, A. Torres, R. Murphy, F.J. De la Hidalga, L.F. Marsal, R. Cabré, J. Pallarés, Proceedings of the Fifth IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDCS2004), November 2004, pp. 168-171.
- 6.053** “Volterra Series in Two Optical Receiver Structures for High Frequency Applications”, J. Martínez, A. Díaz, R. Murphy, J. Finol, Proceedings of the International Conference on Electronic Design (ICED 2004), November 2004, pp. m2 1-4.
- 2005** **6.054** “Electrical Characteristics of a-SiGe:H/c-Si Heterojunction Diodes”, R. Cabré, P. Rosales, A. Torres, L. Hernández, R. Murphy, F.J. De la Hidalga, L.F. Marsal, J. Pallarès, Proceedings of the 2005 Spanish Conference on Electron Devices, February 2005, pp. 271-274.
- 2006** **6.055** “A Simple Electrical RLC Crosstalk Model for Interconnects on Silicon”, J. Huerta, R. Murphy, Proceedings of the Sixth International Caribbean Conference on Devices, Circuits and Systems (ICCDCS2006), April 2006, pp. 79-82.
- 6.056** “Panel — Science and Technology Entrepreneurship For Economic Development (SEED)”, R. Jordán, S. Kassiech, A. Roldán, N. Jerez, R. Lotufo, R. Murphy, Proceedings of the Ninth International Conference on Engineering Education, July 2006, pp. R3C-1—R3C-4.

- 2008** **6.057** “Quantum (5 5 12) Silicon Nanowire 300K MOSFET”, D. L. Kendall, F. J. De la Hidalga, R. R. Rodríguez, M. Castro, A. Torres, W. Calleja, E. Meza Prieto, M. Landa, C. Zúñiga, R. Murphy, N. Carlos, I. Juárez, M. Kendall, Electro Chemical Society Transactions, Vol. 13, No. 1, May 2008, pp. 337-344.
- 2009** **6.058** “A Modified Model for the Self Inductance of Metal Lines on Si”, J. Huerta, R. Murphy, proceedings of the 2009 International Workshop Series on Signal Integrity and High-Speed Interconnects (IMWS2009-R9), February 2009, pp. 111-114.
- 6.059** “Metamaterial-Mems Reconfigurable Transmission Line”, G. Rosas, R. Murphy, A. Corona, proceedings of the 2009 International Iberchip Workshop (IWS2009), March 2009, pp. 581-585.
- 6.060** “Design of a Compact CPW Antenna Using MTM-MEMS”, G. Rosas, R. Murphy, A. Corona, Electro Chemical Society Transactions, Vol. 23, No. 1, August 2009, pp. 295-302.
- 2010** **6.061** “A Short-Channel Silicon-Based Split-Drain MAGFET Measuring from 90 μ T”, G. Santillán, V. Champac, R. Murphy, Proceedings of the 2010 IEEE Lascas, Iguazú, Brazil, February 2010, pp. 108-111.
- 6.062** “Smart Antenna using MTM-MEMS”, G. Rosas, R. Murphy, W. Moreno, Proceedings of the 2010 IEEE Wireless and Microwave Technology Conference, Melbourne, Florida, USA., April 12-13 2010, pp. 1-5.
- 6.063** “Equivalent Rectangular Active Region and SPICE Macro Model for Split Drain MAGFETs”, G. Santillán, R. Murphy, V. Champac, Electro Chemical Society Transactions, Vol. 31, No. 1, September 2010, pp. 393-400.
- 2011** **6.064** “Parameter Extraction Method for Modeling SiGe HBTs Using Cold Condition S-Parameter Measurements”, G. Álvarez, R. Murphy, R. Torres, Proceedings of the XVII International Workshop Iberchip, February 2011, pp. 1-4.
- 6.065** “Design and Fabrication of Reconfigurable Metamaterial Devices using MEMS”, G. Rosas, R. Murphy, W. Moreno, Proceedings of SPIE Vol. 8011, August 2011, pp. 80119L-1- 80119L-7.

- 6.066** “Factibilidad de integrar split-drain MAGFETs con alta sensibilidad en tecnología CMOS” (*On the Feasibility of Integrating High-Sensitivity Split-Drain MAGFETs in CMOS Technology*), G. Santillán, V. Champac, R. Murphy, Proceedings of Encuentro Científico Internacional 2011, Lima, Perú, (Revista ECIPerú, Vol. 8, No. 2), August 2011, pp. 5-12.
- 2012** **6.067** “Novel Fabrication Techniques for RF-MEMS Devices”, G. Rosas, R. Murphy, W. Moreno, Proceedings of the XVIII International IBERCHIP Workshop, Playa del Carmen, Mexico, February 29-March 2 2012, pp. 140-144.
- 6.068** “Accurate Modeling to Characterize the Distributed Substrate Effects in SiGe HBTs”, G. Álvarez, R. Murphy, R. Torres, Proceedings of the XVIII International IBERCHIP Workshop, Playa del Carmen, Mexico, February 29-March 2 2012, pp. 151-154.
- 6.069** “Extraction Methodology of the Substrate Parasitic Network of an RF-MOSFET with Separate Substrate DC Connection”, F. Zárate, G. Álvarez, R. Torres, R. Murphy, Proceedings of the XVIII International IBERCHIP Workshop, Playa del Carmen, Mexico, February 29-March 2 2012, pp. 155-159.
- 6.070** “Modeling the Distributed Physical Effects in the Intrinsic Base of SiGe HBTs Using Transmission Line Concepts”, G. Álvarez, R. Torres, R. Murphy, proceedings of SISPAD 2012, Denver, Colorado, USA, September 5-7, 2012, pp. 320-323.
- 6.071** “La Situación de la Ingeniería en América Latina” (*The Situation of Engineering in Latin America*), R. Murphy, R. Jordán, W. Moreno, D. García, proceedings of the XXVI Congreso Nacional de Posgrado, Morelia, Michoacán, México, September 26-28, 2012, pp. 1-10.
- 6.072** “Overhauling Engineering Education in Latin America”, R. Murphy, R. Jordán, W. Moreno, F. Guarín, D. García, A. Maury, P. Gadani, proceedings of the World Engineering Education Forum (WEEF 2012), Buenos Aires, Argentina, October 15-18, 2012, pp. 1-8.
- 6.073** “ISTEC’s Impact on the Development of Science and Technology Education in Latin America”, R. Jordán, W. Moreno, R. Murphy, D. García, M. De Giusti, proceedings of the World Engineering Education Forum (WEEF 2012), Buenos Aires, Argentina, October 15-18, 2012, pp. 1-9.
- 2013** **6.074** “Design Considerations for Integrated Antennas used in High Frequency Applications”, L. Sandoval, R. Murphy, proceedings of the XIX International IBERCHIP Workshop, Cusco, Perú, February 27-March 1 2013, pp. 2791-1—279-4.

- 6.075** “Understanding the Properties of RF-MOSFETs Using the Smith Chart”, R. Murphy, R. Torres, F. Zárate, Proceedings of the World Engineering Education Forum (WEEF 2013), Cartagena, Colombia, September 24-27, 2013, pp. 1-9.
- 2014** **6.076** “Impact of Multi-Finger Geometry on the Extrinsic Parasitic Resistances of Microwave MOSFETs”, F. Zárate-Rincón, G.A. Álvarez-Botero, R. Murphy, R. Torres, A. Ortiz, Proceedings of the IEEE International Microwave Symposium, Tampa, Florida, USA, June 1-6, 2014, pp. 1-3.
- 2015** **6.077** “Correction of DC Extracted Parameters for Microwave MOSFETs Based on S-Parameter Measurements”, F. Zárate-Rincón, R. Murphy, R. Torres, Proceedings of the IEEE International Microwave Symposium (IMS2015), Phoenix, Arizona, USA, May 18-22, 2015, pp. 1-4
- 6.078** “A Reconfigurable Metamaterial-MEMs Antenna for Sensing Applications”, G. Rosas, R. Murphy, J.L. Olvera, W. Moreno, Proceedings of the 9th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics, Oxford, England, September 7-12, 2015, pp. 114-116.
- 2016** **6.079** “Pitch Walking Assessment after Self-Aligned Double Patterning for the 10 nm Logic Technology Node”, F. Zárate, V. Vega, I. Ciofi, C. Wilson, M. van der Veen, P. Roussel, J. Boemmels, Z. Tokei, R. Torres, R. Murphy, Proceedings of the 25th Conference on Materials for Advanced Metallization (MAM 2016), Brussels, Belgium, March 20-23, 2016, pp. 117-118.
- 6.080** “An Overview of RF and Microwave Engineering Research Collaboration between Latin America and the Rest of the World”, R. Murphy, R. Torres, Proceedings of the 46th European Microwave Conference (EuMWC 2016), London, England, October 3-6, 2016, pp. 843-846.
- 2017** **6.081** “A Versatile, CMOS Compatible, Integrated Antenna for Millimeter-Wave Applications”, R. Murphy, L. Sandoval, Proceedings of the 2017 Latin American Symposium on Circuits and Systems (LASCAS 2017), Bariloche, Argentina, February 20-23, 2017, pp. 37-40.
- 6.082** “On the Extraction Methods for MOSFET Series Resistance and Mobility Degradation using a Single Test Device”, A.Ortiz, A. Sucre, F. Zárate, R. Torres, R. Murphy, J.J. Liou, F. García, Proceedings of the 2017 International Caribbean Conference on Devices, Circuits and Systems (ICCDCS 2017), Cozumel, Mexico, June 5-7, 2017, pp. 15-20.

- 6.083** “Analytical Model Parameter Determination for Microwave On-Chip Inductors up to the Second Resonant Frequency”, J. Valdés, R. Torres, R. Murphy, Proceedings of the 2017 International Caribbean Conference on Devices, Circuits and Systems (ICCDCS 2017), Cozumel, Mexico, June 5-7, 2017, pp. 25-28.
- 2018** **6.084** “Design and Construction of Dual-Mode Micro-Strip Resonator Filters for the 950-1,450 MHz Band: Application as IF Filters in Microwave Transceivers”, L. Rodríguez, C. Gutiérrez, J. Meza, A. Torres, R. Murphy, Proceedings of the 2018 IEEE 9th Latin American Symposium on Circuits and Systems (LASCAS), Puerto Vallarta, Mexico, February 25-28, 2018, pp. 1-4. DOI: 10.1109/LASCAS.2018.8399962
- 6.085** “Some Considerations Regarding the Modeling and Characterization of Bulk CMOS Devices for High-Frequency Applications”, R. Murphy, R. Torres, Proceedings of the 2018 IEEE 13th Nanotechnology Materials and Devices Conference (NMDC), Portland, Oregon, USA, October 15-17, 2018, pp. 1-5. DOI: 10.1109/NMDC.2018.8605837
- 6.086** “Compact L-Band Filter in a k-Band Radiometer for Atmospheric Attenuation over Line-of-Sight Links”, L. Rodríguez, C. Gutiérrez, L. Tecuapela, R. Murphy, Proceedings of the 2018 IEEE 2nd Latin American Microwave Conference (LAMC 2018), Arequipa, Perú, December 12-14, 2018, pp. 1-4. DOI:
- 2021** **6.087** “Modeling Passive Devices for CMOS RF Circuits” (Invited Paper), J. Valdés, R. Torres, R. Murphy, Proceedings of the 28th International Conference “Mixed Design of Integrated Circuits and Systems (MIXDES 2021), Łódź, Poland, June 24-26, 2021, pp. 20-24. DOI: 10.23919/MIXDES52406.2021.9497635
- 2022** **6.088** “Metamaterial-Based Antennas for On-Chip Applications in the Millimeter-Wave Range”, K. Olan, R. Murphy, Proceedings of the 2022 IEEE AP-s/URSI Conference, Denver, CO, USA, July 10-15, 2022, pp. 1016-1017.
DOI:10.1109/AP-S/USNC-URSI47032.2022.9886267
- 6.089** “Dual-band Slot-SSR Antenna on PLA-printed Substrate for 2.4/5.8 GHz ISM-Band Internet of Things (IoT) Applications”, K. Olan, R. Murphy, M. Alibakhshikenari, Proceedings of the IEEE 8th World Forum on Internet of Things 26 October–11 November 2022, Yokohama, Japan pp. 1-6.
DOI: 10.1109/WF-IOT54382.2022.10152048

- 2023** **6.090** “Mechanically Reconfigurable Multi-band Antenna on a 3D-printed Substrate for C/X Band Applications”, K. Olan, H. Morales, R. Murphy, Proceedings of the 2023 IEEE Ap-s/URSI Conference, Portland, OR, USA, July 23-28, 2023, pp. 1073-1074. DOI:10.1109/AP-S/USNC-URSI
- 6.091** “Determination of the Relative Permittivity and Loss Tangent of Liquid Samples Using a Miniature Low-Cost Microwave Sensor”, K. Olan, R. Murphy, H. Morales, Proceedings of the 2023 Latin American Microwave Conference, San José, Costa Rica, December 6-8, 2023, pp. 88-91. DOI:10.1109/LAMC59011.2023.10375600
- 2025** **6.092** “A 28 GHz Double Patch Double Beam Antenna with Circular Polarization for Energy Harvesting”, H. Cárdenas, R. Murphy, Proceedings of the 2025 IEEE MTT-S Latin America Microwave Conference (LAMC), San Juan, Puerto Rico, USA, January 22-24, 2025, pp. 46-49. DOI:10.1109/LAMC63321.2025.10880558
- 6.093** “Modified Koch Fractal Antenna for IoT Applications in Smart Homes”, P. Pérez, R. Murphy, Proceedings of the 2025 IEEE MTT-S Latin America Microwave Conference (LAMC), San Juan, Puerto Rico, USA, January 22-24, 2025, pp. 58-61. DOI:10.1109/LAMC63321.2025.10880537
- 6.094** “Mixed Mode: More than Analog and Digital”, R. Murphy, R. Torres, Proceedings of the 32nd International Conference on Mixed Design of Integrated Circuits and System (MIXDES), Szczecin, Poland, June 26-27, 2025, pp. 21-25. DOI:10.23919/MIXDES66264.2025.11092188
- 6.095** “Derivation of the Frequency Equation for an RTWO Oscillator Based on its Geometry and Topology in CMOS Technology”, J.P. Azucena-Varela, M. Linares-Aranda, R. Murphy-Arteaga, Proceedings of the 22nd International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE), Mexico City, Mexico, October 22-24, 2025, pp. 1-5. DOI:10.1109/CCE67728.2025.11271966

7.- SUMMARIES IN CONFERENCE PROCEEDINGS

- 1988** **7.1** “Obtención de Parámetros para Modelos Matemáticos de Transistores MOS” (*The Obtaining of Parameters for Mathematical Models for the MOS Transistor*), R. Murphy, M. Linares, M. Aceves, Proceedings of the XXXI National Conference on Physics, Monterrey, Nuevo León, México, October 1988, pp. 22-23.
- 1990** **7.2** “Diseño y Fabricación de Circuitos Integrados CMOS” (*Design and Fabrication of CMOS Integrated Circuits*), W. Calleja, M. Linares, R. Murphy, M. Aceves, A. Torres, J. Remolina, S. Fuentes, P. Peykov, M. Landa, I. Fuentes, T. Flores, T. León, C. Zúñiga, I. Zaldívar, Proceedings of the XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990, p. 34.
- 7.3** “Caracterización Estadística de Capacitores Integrados MOS” (*Statistical Characterization of Integrated MOS Capacitors*), B. Chavira, R. Murphy, Proceedings of the XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990, p. 86.
- 7.4** “Diseño y Fabricación de un Sensor Magnético de Efecto Hall” (*Design and Fabrication of a Hall Effect Magnetic Sensor*), J. Remolina, W. Calleja, M. Linares, R. Murphy, M. Landa, I. Fuentes, I. Zaldívar, T. Flores, T. León, Proceedings of the XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990, p. 102.
- 7.5** “Desarrollo de un Proceso de Fabricación NMOS” (*The Development of an NMOS Fabrication Process*), W. Calleja, F. Hernández, J. Remolina, M. Linares, R. Murphy, M. Landa, I. Fuentes, I. Zaldívar, T. Flores, T. León, Proceedings of the XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990, p. 102.
- 7.6** “Celdas Básicas Digitales” (*Digital Basic Cells*), R. Murphy, M. Linares, S. Fuentes, W. Calleja, J. Remolina, I. Zaldívar, M. Landa, I. Fuentes, T. Flores, T. León, Proceedings of the XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990, p. 102.
- 7.7** “Caracterización Eléctrica de Circuitos Integrados CMOS” (*Electrical Characterization of CMOS Integrated Circuits*), M. Linares, R. Murphy, W. Calleja, S. Fuentes, M. Aceves, I. Zaldívar, M. Landa, I. Fuentes, T. Flores, T. León, Proceedings of the XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990, p. 102.

- 7.8** “Implantación de Iones en Circuitos MOS Complementarios” (*Ion Implantation in Complementary MOS Circuits*), W. Calleja, M. Linares, R. Murphy, J. Remolina, M. Aceves, A. Torres, S. Fuentes, M. Landa, I. Fuentes, C. Zúñiga, I. Zaldívar, Proceedings of the XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990, p. 102.
- 7.9** “Películas CVD para Procesos MOS” (*CVD Films for MOS Processes*), W. Calleja, M. Linares, R. Murphy, A. Torres, M. Aceves, M. Landa, S. Fuentes, I. Fuentes, Proceedings of the XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990, p. 103.
- 1991** **7.10** “Aplicación de Métodos Estadísticos para Determinar las Causas de Variabilidad en la Evaporación de Aluminio: Un caso de Estudio” (*Application of Statistical Methods to Determine the Causes of Variability in Aluminum Evaporation: A Case Study*), M. Aceves, J. Hernández, R. Murphy, IV National Encounter of Alumni of the School of Higher Physics and Mathematics of the National Polytechnic Institute (IPN), Taxco, Guerrero, May 1991.
- 7.11** “Un Dispositivo para Ayuda en Deficiencias Auditivas” (*A Hearing Loss Assistance Device*), F. Sandoval, R. Murphy, Proceedings of the XXXIV National Conference on Physics, México City, México, October 1991, p. 24.
- 7.12** “Estudio Comparativo de los Métodos ΔV_{BE} y Punzonado para Medir la Adherencia de Transistores de Potencia” (*A Comparative Study of the ΔV_{BE} and Die-Punch Methods to Measure the Adherence of Power Transistors*), M. Aceves, R. Murphy, XXXIV National Conference on Physics, México City, México, October 1991, p. 42.
- 1992** **7.13** “Depósito LPCVD de Silicio Policristalino: Una Revisión” (*LPCVD of Polycrystalline Silicon: A Review*), R. Murphy, M. Aceves, A. Torres, M. Landa, I. Fuentes, Proceedings of the XXXV National Conference on Physics, Puebla, Puebla, México, October 1992, pp. 2.
- 1993** **7.14** “Análisis por Computación del Gammagrama de Vaciamiento Gástrico” (*Computer Analysis of the Gastric Emptying Gammagram*), C. Arteaga, R. Murphy, C. Manzano, L. Uscanga, L. Morales, Proceedings of the XXVII Annual Conference of the Mexican Society of Nuclear Medicine, Ajijic, Jalisco, México, May 1993, pp. 112.

- 7.15** "Modelado de la Curva de Vaciamiento Gástrico" (*Modeling of the Gastric Emptying Curve*), R. Murphy, C. Arteaga, Proceedings of the XXXVI National Conference on Physics, Acapulco, Gro., México, October 1993, pp. 87.
- 7.16** "The Use of Statistical Methods to Insure the Quality and Optimization of Polysilicon Deposition", M. Aceves, R. Murphy, A. Torres, W. Calleja, 1993 International Integrated Reliability Workshop, Lake Tahoe, California, USA, October 1993, pp. 113-122.
- 1997** **7.17** "Modelado de Circuitos Integrados CMOS" (*Modeling of CMOS Integrated Circuits*), R. Murphy, Proceedings of the VII Conference on Electronics, Electricity and Computational Systems, Tuxtla Gutiérrez, Chis., México, October 1997, pp. 24-27.
- 1998** **7.18** "Impedancia del Polisilicio Usado como Línea de Interconexión en Circuitos Integrados" (*Impedance of the Polysilicon used as Interconnect in Integrated Circuits*), Proceedings of the VI Regional Encounter on Research and Teaching of Physics, Puebla, Pue., México, June 1998, pp. 40.
- 1999** **7.19** "Temperature Dependence on Carrier Deflection in a Split-Drain Magfet", P. García, E. Gutiérrez, R. Murphy, Meeting Abstracts of the Fifth International Symposium on Low Temperature Electronics, Honolulu, Hawaii, USA, October 1999, pp. 1201.
- 2000** **7.20** "Caracterización del TMOS en Altas Frecuencias" (*High Frequency Characterization of the MOS Transistor*), R. Murphy, Proceedings of the First Research Encounter, INAOE, Tonantzintla, Puebla, México, November 2000, pp. 6.
- 7.21** "Fabricación de Transistores de Heterounión de Silicio" (*Fabrication of Heterojunction Transistors in Silicon*), P. Rosales, A. Torres, R. Murphy, Proceedings of the First Research Encounter, INAOE, Tonantzintla, Puebla, México, November 2000, pp. 9.
- 2001** **7.22** "Fabricación y Caracterización de Inductores Sobre Silicio" (*Fabrication and Characterization of Inductors on Silicon*), J. Huerta, A. Díaz, A. Torres, R. Murphy, W. Calleja, M. Landa, Proceedings of the XXI National Conference of Vacuum and Surface Sciences, October 2001, p. 54.
- 2002** **7.23** "Estado Actual y Perspectivas de los Postgrados en Ingeniería y Tecnología en México" (*Current State and Future of Graduate Studies in Engineering and Technology in México*), R. Murphy, Proceedings of the XVI National Conference on Graduate Studies, October 2002, p. 48-49.

- 2005** **7.24** “La Entrevista como Auxiliar en el Proceso de Admisión a la Maestría” (*The Interview as an Aid in the Admisión Process to a Master’s Program*), S. Zueck, A. Sarmiento, R. Murphy, Proceedings of the XIX National Conference on Graduate Studies, September 2005, p. 66.
- 7.25** “La Entrevista como Herramienta de Evaluación Cualitativa en el Proceso de Selección a la Maestría en Electrónica del INAOE” (*The Interview as a Tool in the Qualitative Evaluation in the Selection Process for the Master’s in Electronics Program at INAOE*), S. Zueck, A. Sarmiento, R. Murphy, Proceedings of the XIX National Conference on Graduate Studies, September 2005, p. 106.
- 2007** **7.26** “Electrical behaviour of Ti electrodes on MIM structures using a-C:H film as insulator”, C Zuñiga, A. Kosarev, A. Torres, P. Rosales., W. Calleja, F. De la Hidalga, R. Murphy, Workshop on Frontiers in Electronics, Cozumel, México, December 2007.
- 7.27** “Analytical characterization and modeling of shielded test structures for RFCMOS”, E. Torres, R. Torres, R. Murphy, E. Gutiérrez, Workshop on Frontiers in Electronics, Cozumel, México, December 2007.
- 2013** **7.28** “Integrated Antennas”, R. Murphy, International Engineering Seminar, Colombia, September 17-20, 2013.
- 7.29** “Relevance of Engineering Education for Latin American Development”, R. Murphy, International Engineering Seminar, Colombia, September 17-20, 2013.
- 2015** **7.30** “Modelo escalable para la inductancia intrínseca de inductores espirales en RFCMOS” (*Scalable model for the intrinsic inductance of spiral RFCMOS inductors*), J. Valdés-Rayón, R. Murphy-Arteaga, R. Torres-Torres, Proceedings of the LVIII National Conference on Physics, Mérida, Yucatán, México, October 2015, pp. 122-123.
- 2023** **7.31** “Resonance-Related Fluctuations on Experimental Characteristic Impedance Curves for PCB and On-Chip Transmission Lines”, Y. Rodríguez-Velásquez, R. Murphy-Arteaga, Proceedings of the 2023 International Microwave Symposium, San Diego, CA, USA, June 2023, pp. 627.

8.- TECHNICAL REPORTS

- 1990** **8.1** “Micro-INAOE: Programa de Demostración del Diseño, Fabricación y Caracterización de Circuitos Integrados CMOS en el INAOE” (*Micro-INAOE: A Program to Show the Design, Fabrication and Characterization of CMOS Integrated Circuits in the INAOE*), S. Fuentes, J. Palomino, R. Murphy, M. Linares, M. Landa, C. Zúñiga, W. Calleja, M. Aceves, I. Fuentes, Technical Report # 87, INAOE, Tonantzintla, Puebla, 1990.
- 1991** **8.2** “Caracterización y Control del Proceso de Fabricación de Circuitos Integrados EC MOS I” (*Characterization of the EC MOS I Integrated Circuit Fabrication Process*), M. Linares, R. Murphy, M. Aceves, W. Calleja, Technical Report # 88, INAOE, Tonantzintla, Puebla, 1991.
- 1993** **8.3** “Fortalecimiento del Postgrado en Microelectrónica en el INAOE” (*The Strengthening of Graduate Studies in Microelectronics in the INAOE*), R. Murphy, M. Linares, T. León, T. Flores, Final Technical Report, COSNET Project Number 183.89, 1993.
- 1994** **8.4** “Apuntes de Teoría Electromagnética” (*Electromagnetic Theory Notes*), R. Murphy, Technical Report # 175, INAOE, Tonantzintla, Puebla, 1994.
- 1996** **8.5** “Celdas Digitales Estándar CMOS” (*Standard Digital CMOS Cells*), M. Linares, R. Murphy, W. Calleja, Technical Report # 204, INAOE, Tonantzintla, Puebla, 1996.

9.- GENERAL INTEREST ARTICLES

- 1989** **9.1** “Laboratorio de Microelectrónica del Instituto Nacional de Astrofísica, Óptica y Electrónica” (*The Microelectronics Laboratory of the National Institute for Research in Astrophysics, Optics and Electronics*), R. Murphy, “Kinesis”, Journal of the Universidad Veracruzana, December 1989, pp. 29-31, 1989.
- 1992** **9.2** “Métodos Estadísticos Para Mejorar la Calidad de Procesos Industriales” (*Statistical Methods to Improve the Quality of Industrial Processes*), M. Aceves, R. Murphy, L.A. Hernández, Technical Report Section of “Contacto” (in three parts), Vol. 3, No. 26, June 1992; Vol. 3, No. 27, July 1992; Vol. 3, No. 28, August 1992.
- 1998** **9.3** “Determinación de Valores de Parámetros de Modelos Matemáticos por Optimización” (*Determination of the Value of the Parameters used in Mathematical Models by Optimization*), R. Murphy, Imaquinación, Journal published by the Electronics Department, INAOE, Vol. 1, No. 1, April 1998, pp. 12-16.
- 9.4** “El Vertiginoso Desarrollo hacia la Microelectrónica”, (*The Amazing Development of Microelectronics*), R. Murphy, Daily Síntesis, University Section, May 19, 1998, pp. 6-7.
- 1999** **9.5** “¡Desarrollemos la microelectrónica en México!” (*Lets Develop Microelectronics in México!*), R. Murphy, Bulletin of the Mexican Society of Physics, Vol. 13, No. 3, July-September 1999, pp. 123-124. Also published in “Electrónica Universitaria”, Universidad de las Américas, Second Year, No. 5, November 1999, pp. 10-11.
- 9.6** “Hagamos microelectrónica en México” (*Lets Do Microelectronics in México*), R. Murphy, Revista Perfiles de la UDLA, Year XIV, No. 17, December 1999, pp. 14.
- 2000** **9.7** “La Fabricación de Circuitos Integrados en México: Propuesta para Crear Centro Nacional de Microelectrónica” (*Fabrication of Integrated Circuits in México: A Proposal to Create a National Center for Microelectronics*), R. Murphy, Daily Síntesis, University Section, Monday 11 December 2000, pp. 2.
- 9.8** “Caracterización del Transistor MOS en Altas Frecuencias” (*High Frequency Characterization of the MOS Transistor*), R. Murphy, Proceedings of the First Research Encounter, INAOE, Tonantzintla, Puebla, México, November 2000, pp. 117-120.

- 9.9** “Fabricación de Transistores de Heterounión en Silicio” (*Fabrication of Heterojunction Transistors in Silicon*), P. Rosales, A. Torres, R. Murphy, Proceedings of the First Research Encounter, INAOE, November 2000, pp. 167-170.
- 2001**
- 9.10** “Importancia de apoyar la nanoelectrónica” (*The importance of Fomenting Nanoelectronics*), R. Murphy, Daily La Jornada, Monday with the Sciences Section, Monday 22 January 2001, pp. II-III.
- 9.11** “Caracterización del Transistor MOS en Altas Frecuencias” (*High Frequency Characterization of the MOS Transistor*), R. Murphy, Proceedings of the Second Research Encounter, INAOE, Tonantzintla, Puebla, México, November 2001, pp. 157-160.
- 9.12** “Fabricación y Caracterización de Inductores Coplanares Integrados” (*Fabrication and Characterization of Coplanar Integrated Inductors*), J. Huerta, A. Díaz, A. Torres, R. Murphy, W. Calleja, M. Landa, Proceedings of the Second Research Encounter, INAOE, Tonantzintla, Puebla, México, November, pp. 189-192.
- 2002**
- 9.13** “Problemas que Enfrentan los Postgrados en Ingeniería y Tecnología en México” (*Problems Affecting Graduate Programs in Engineering and Technology in México*), R. Murphy, Proceedings of the Third International Conference on Higher Education, Havana, Cuba, February 2002, pp. 136-147.
- 9.14** “Difusión de Boro en $\text{Si}_{0.848}\text{Ge}_{0.15}\text{C}_{0.002}$ Usando Recocidos Térmicos Rápidos a Altas Temperaturas” (*Diffusion of Boron in $\text{Si}_{0.848}\text{Ge}_{0.15}\text{C}_{0.002}$ using High-Temperature Rapid Thermal Annealing*), P. Rosales, A. Torres, R. Murphy, C. Zúñiga, Proceedings of the Third Research Encounter, INAOE, November 2002, pp. 267-270.
- 9.15** “Modelado de la Capacitancia Parásita de Compuerta de un TMOS LDD” (*Modeling the Parasitic Gate Capacitance of an LDD MOST*), L. Ortega, R. Murphy, Proceedings of the Third Research Encounter, INAOE, INAOE, November 2002, pp. 303-306.
- 9.16** “Modelado del Transistor MOS para Aplicaciones de RF Utilizando BSIM3v3” (*Modeling the MOS Transistor for RF Applications using BSIM 3V3*), R. Torres, R. Murphy, Proceedings of the Third Research Encounter, INAOE, November 2002, pp. 307-310.

- 2003** **9.17** “On the State of Electronic Engineering Education in México”, R. Murphy, Proceedings of the Ibero American Summit on Engineering Education, São José dos Campos, Brazil, March 2003, pp. 1-4.
- 9.18** “Efecto de la Corriente de Fuga a Altas Frecuencias en Transistores MOS con Óxido de Compuerta Ultra-Delgado” (*Effects of Leakage Currents in MOS Transistors with Ultra-Thin Gate Oxides*), R. Torres, R. Murphy, Proceedings of the Fourth Research Encounter, INAOE, November 2003, pp. 141-144.
- 9.19** “n-Type a-SiGe:H/p-Type Crystalline-Silicon Heterojunctions”, P. Rosales, A. Torres, R. Murphy, M. Landa, C. Zúñiga, Proceedings of the Fourth Research Encounter, INAOE, November 2003, pp. 153-156.
- 2004** **9.20** “Low Temperature Annealing on n-type a-SiGe:H/p-type c-Silicon Heterojunctions”, P. Rosales, A. Torres, R. Murphy, F.J. De la Hidalga, Proceedings of the Fifth Research Encounter, INAOE, November 2004, pp. 169-172.
- 2010** **9.21** “Nivel Académico y Demanda de Posgrados” (*Academic Level and Demand of Graduate Studies*), R. Murphy, daily journal El Financiero, Wednesday May 26 2010, pp. 8-9.
- 9.22** “MTT World: Microwave Engineering in Mexico”, R. Murphy, R. Torres, Microwave Magazine, Vol. 11, No. 6, October 2010, pp. 152-148.
- 2013** **9.23** “Mexico: More than Tortilla Chips”, R. Murphy, 50th Design Automation Conference (DAC 2013), Austin, Texas, EUA, June 2013.
- 2014** **9.24** “R&D in Latin America”, R. Murphy, R. Torres, J.E. Rayas, A. Reynoso, M. Maya, A. Henze, A. Zozaya, P. Del Pino, J. Peña, G. Rafael, IEEE Microwave Magazine, IMS Special Issue, May 2014, pp. 97-103.
- 2015** **9.25** “A Bird’s-eye View of Microwave R&D in Latin America”, R. Murphy, Proceedings of the IEEE International Microwave Symposium (IMS 2015), Phoenix, Arizona, USA, May 2015, pp. 1-3.
- 2018** **9.26** “High Frequency Device Characterisation Laboratory at the “Instituto Nacional de Astrofísica, Óptica y Electrónica (INAOE)”, Tonantzintla, Puebla, México”, R. Murphy, R. Torres, Proceedings of the 48th European Microwave Conference, Madrid, Spain, September 2018, pp. 592-595.

2022

9.27

“The Transistor’s Diamond Jubilee” (in Spanish), R. Murphy, in section “México es Ciencia” of the “El Sol de México” newspaper, May 13, 2022. <https://www.elsoldemexico.com.mx/analisis/el-aniversario-de-brillantes-del-transistor-8274233.html>

10.- THESES AND CHAPTERS IN BOOKS

- 1982** **10.1** “P-N Junction and MOSFET Capacitance”, St. John’s University, 1982.
- 1988** **10.2** “Bases para el Diseño y Fabricación de Circuitos Analógicos Integrados CMOS” (*Basis for the Design and Fabrication of Analog CMOS Integrated Circuits*), National Institute for Research in Astrophysics, Optics and Electronics, 1988.
- 1997** **10.3** “Prospects for the MOS Transistor as a High Frequency Device”, National Institute for Research in Astrophysics, Optics and Electronics, 1997.
- 1998** **10.4** “Teoría Electromagnética para Estudiantes de Electrónica y Física” (*Electromagnetic Theory for Students of Electronics and Physics*), National Institute for Research in Astrophysics, Optics and Electronics, 1998, Registered before the National Institute of Authorial Rights under number INDA # 03-1998-120912191600-01.
- 2001** **10.5** “Teoría Electromagnética” (*Electromagnetic Theory*), Editorial Trillas, ISBN 968-24-6277-0, June 2001.
- 10.6** Book Chapter: “The FTO/SRO/Si Structure as a Radiation Sensor”, M. Aceves, A. Malik, R. Murphy, in book “Sensors & Chemometrics 2001”, Research Signpost, India, ISBN 81-7736-067-1, November 2001, pp. 1-25.

11.- PRESENTATIONS IN CONFERENCES

- 1983** **11.001** “Chips y Medicina Nuclear” (*Chips and Nuclear Medicine*), XVII Annual Conference of the Mexican Society of Nuclear Medicine, Cuernavaca, Morelos, México, April 1983.
(Plenary session presentation, 10 minutes.)
- 1989** **11.002** “Caracterización del Proceso de Fabricación de Circuitos Integrados del INAOE”, (*Characterization of the Integrated Circuit Fabrication Process at the INAOE*), V Seminar on Physical Electronics, México City, México, August 1989.
(Plenary session presentation, 20 minutes.)
- 1990** **11.003** “Un Proceso CMOS de Nueve Niveles”, (*A Nine Level CMOS Process*), R. Murphy, Electronics and Communications Conference UDLA-P-90. Universidad de las Américas, Puebla, February 1990.
(Simultaneous session presentation, 50 minutes.)
- 11.004** “Diseño y Fabricación de Circuitos Integrados CMOS” (*Design and Fabrication of CMOS Integrated Circuits*), XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990.
(Simultaneous session presentation, 10 minutes.)
- 11.005** “Diseño y Fabricación de un Sensor Magnético de Efecto Hall” (*Design and Fabrication of a Hall Effect Magnetic Sensor*), XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990.
(Oral explanation of poster.)
- 11.006** “Desarrollo de un Proceso de Fabricación NMOS” (*The Development of an NMOS Fabrication Process*), XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990.
(Oral explanation of poster.)
- 11.007** “Celdas Básicas Digitales” (*Digital Basic Cells*), XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990.
(Oral explanation of poster.)
- 11.008** “Caracterización Eléctrica de Circuitos Integrados CMOS” (*Electrical Characterization of CMOS Integrated Circuits*), XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990.
(Oral explanation of poster.)

- 11.009** “Implantación de Iones en Circuitos MOS Complementarios” (*Ion Implantation in Complementary MOS Circuits*), XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990.
(Oral explanation of poster.)
- 11.010** “Películas CVD para Procesos MOS” (*CVD Films for MOS Processes*), XXXIII National Conference on Physics, Ensenada, Baja California, México, October 1990.
(Oral explanation of poster.)
- 1991** **11.011** “Modelado de Circuitos Integrados CMOS en HSPICE” (*The Modeling of CMOS Integrated Circuits Using HSPICE*), Electronics and Communications Conference, UDLA-P-91, February 1991.
(Plenary session presentation, 50 minutes.)
- 11.012** “Characterization and Modeling of Integrated Circuits”, México-Japan Microelectronics Seminar, INAOE, April 1991.
(Plenary session presentation, 20 minutes.)
- 11.013** “Caracterización de Circuitos Integrados” (*Characterization of Integrated Circuits*), Universidad Autónoma de Puebla, Puebla, Puebla, México, May 2 1991.
(Invited plenary session presentation, 50 minutes.)
- 11.014** “Modelado de Dispositivos CMOS” (*Modeling of CMOS Devices*), IV Week of Electronic Engineering, ITESO, Guadalajara, Jalisco, México, August 27 1991.
(Plenary session presentation, 50 minutes.)
- 11.015** “Un Dispositivo para Ayuda en Deficiencias Auditivas” (*A Hearing Loss Assistance Device*), XXXIV National Conference on Physics, México City, México, October 21, 1991.
(Simultaneous session presentation, 10 minutes.)
- 11.016** “Estudio Comparativo de los Métodos ΔV_{BE} y Punzonado para Medir la Adherencia de Transistores de Potencia” (*A Comparative Study of the ΔV_{BE} and Die-Punch Methods to Measure the Adherence of Power Transistors*), XXXIV National Conference on Physics, México City, México, October 22, 1991.
(Oral explanation of poster.)
- 1992** **11.017** “Depósito LPCVD de Silicio Policristalino: Una Revisión” (*LPCVD of Polycrystalline Silicon: A Review*), XXXV National Conference on Physics, Puebla, Puebla, México, October 26 1992.
(Simultaneous session presentation, 10 minutes.)

- 1993** **11.018** “Modelado de la Curva de Vaciamiento Gástrico” (*Modeling of the Gastric Emptying Curve*), XXXVI National Conference on Physics, Acapulco, Guerrero, México, October 22 1993.
(Simultaneous session presentation, 10 minutes.)
- 1996** **11.019** “Sobre la Caracterización en Alta Frecuencia de Transistores MOS” (*On the High-Frequency Characterization of MOS Transistors*), R. Murphy, E. Gutiérrez, VI International Conference on Electronics, Communications and Computers (CONIELECOM UDLA'96), February 29 1996.
(Simultaneous session presentation, 20 minutes.)
- 11.020** “Programa de Computación BIEXP para Radiofarmaco-cinética”, (*BIEXP: a Computer Program for Radiopharmaceutical kinetics*) Advanced Workshop for the Training on Radiopharmaceutical kinetics, México City, México, March 1 1996.
(Oral explanation of poster.)
- 11.021** “Sobre el Modelado de Dispositivos Semiconductores” (*On the Modeling of Semiconductor Devices*), Electronic Engineering Colloquium, Instituto Tecnológico de Puebla, Puebla, Puebla, México, September 12 1996.
(Plenary session presentation, 50 minutes.)
- 1997** **11.022** “Modelado de Circuitos Integrados CMOS” (*Modeling of CMOS Integrated Circuits*), R. Murphy, VII Conference on Electronics, Electricity and Computational Systems, Tuxtla Gutiérrez, Chiapas, México, October 23 1997.
(Plenary session presentation, 50 minutes.)
- 1998** **11.023** “Characterization of the Submicron MOS Transistor for High-Frequency Applications”, VIII International Conference of Electronics, Communications and Computers (CONIELECOMP 98), Cholula, Puebla, México, February 25 1998.
(Simultaneous session presentation, 20 minutes.)
- 11.024** “Modelado de Circuitos Integrados CMOS” (Modeling of CMOS Integrated Circuits), First Updating Conference on Electronic Engineering, Communications and Computers, Poza Rica, Veracruz, México, March 25, 1998.
(Simultaneous session presentation, 20 minutes.)
- 11.025** “Impedancia del Polisilicio Usado como Línea de Interconexión en Circuitos Integrados” (*Impedance of the Polysilicon used as Interconnect in Integrated Circuits*), VI Regional Encounter on Research and Teaching of Physics, Puebla, Puebla, México, June 26, 1998.
(Oral explanation of poster.)

- 11.026** “A Straightforward De-Embedding Technique for High-Frequency Measurements of MOS Transistors”, 2nd International Conference on Research in Electrical and Electronics Engineering, Aguascalientes, Aguascalientes, México, September 14, 1998. (Simultaneous session presentation, 20 minutes.)
- 11.027** “La Necesidad del Desarrollo de la Microelectrónica en México” (*The Need to Develop Microelectronics in México*), Puebla Institute of Technology, Puebla, Puebla, México, October 9, 1998. (Invited plenary session presentation, 50 minutes.)
- 1999**
- 11.028** “Impedancia de Líneas de Polisilicio” (*Impedance of Polysilicon Lines*), IX International Conference on Electronics, Communications and Computers (CONIELECOMP 99), Cholula, Puebla, México, March 2, 1999. (Simultaneous session presentation, 20 minutes.)
- 11.029** “Temperature Dependence of a Split—Drain MAGFET”, IX International Conference on Electronics, Communications and Computers (CONIELECOMP 99), Cholula, Puebla, México, March 2, 1999. (Simultaneous session presentation, 20 minutes.)
- 11.030** “Análisis de Líneas de Interconexión de Polisilicio para Circuitos Integrados CMOS” (*Analysis of Polysilicon Interconnect Lines for CMOS Integrated Circuits*), First International Conference on Electronics, Communications and Computers (CIECC’99), March 24, 1999. (Simultaneous session presentation, 20 minutes.)
- 11.031** “Algunas Consideraciones Sobre el Diseño y Fabricación de Circuitos Integrados CMOS para Comunicaciones Inalámbricas” (*Some Considerations on the Design and Fabrication of CMOS Integrated Circuits for Wireless Communications*), Institutional Seminary of the INAOE, July 22, 1999. (Plenary session presentation, 50 minutes.)
- 11.032** “Algunas Consideraciones Sobre el Diseño y Fabricación de CI CMOS para Aplicaciones Inalámbricas” (*Some Considerations on the Design and Fabrication of CMOS Integrated Circuits for Wireless Applications*), Seminary of the Master’s in Semiconductor Devices Program, Research Center for Semiconductor Devices, BUAP, July 23, 1999. (Invited plenary session presentation, 50 minutes.)

- 2000** **11.033** “Circuitos Integrados CMOS para Comunicaciones Inalámbricas: Lineamientos de Diseño, Fabricación y Simulación” (*CMOS Integrated Circuits for Wireless Communications: Guidelines for the Design, Fabrication and Simulation*), X International Conference on Electronics, Communications and Computers (CONIELECOMP 2000), February 29, 2000.
(Invited plenary session presentation, 60 minutes.)
- 11.034** “Simulación de Circuitos Integrados CMOS para Aplicaciones en Altas Frecuencias Usando SPICE” (*Simulation of CMOS Integrated Circuits for High Frequency Applications using SPICE*), X International Conference on Electronics, Communications and Computers (CONIELECOMP 2000), March 1st 2000.
(Simultaneous session presentation, 20 minutes.)
- 11.035** “Fabricación de Circuitos Integrados en México” (*Fabrication of Integrated Circuits in México*), SIEEEM2000, Monterrey, Nuevo León, México, October 13, 2000.
(Invited plenary session presentation, 80 minutes.)
- 11.036** “Caracterización del TMOS en Altas Frecuencias” (*High Frequency Characterization of the MOS Transistor*), First Research Encounter, INAOE 2000, Tonantzintla, Puebla, México, November 16, 2000.
(Plenary session presentation, 15 minutes)
- 2001** **11.037** “A Perspective of Research & Development in México”, Annual Ibero American Research and Development Summit (AIRDS 2001), Albuquerque, New México, USA, May 8 2001.
(Invited simultaneous session presentation, 20 minutes.)
- 11.038** “Caracterización del TMOS en Altas Frecuencias” (*High Frequency Characterization of the MOS Transistor*), Second Research Encounter, INAOE 2001, Tonantzintla, Puebla, México, November 15, 2001.
(Oral explanation of poster)
- 11.039** “Microelectrónica en México” (*Microelectronics in México*), First International Conference of Systems and Communications, Cristóbal Colón University, Veracruz, Veracruz, México, November 17, 2001.
(Invited plenary session presentation, 105 minutes)
- 2002** **11.040** “Problemas que Enfrentan los Postgrados en Ingeniería y Tecnología en México” (*Problems Affecting Graduate Programs in Engineering and Technology in México*), Third International Conference on Higher Education, Havana, Cuba, February 5 2002.
(Plenary session, 45 minutes)

- 11.041** “La Física y las Matemáticas en el Análisis y Diseño del Transistor MOS” (*Physics and Mathematics in the Analysis and Design of the MOS Transistor*), Sixth Cycle of Physics and Mathematics Conferences, Universidad de las Américas, Cholula, Puebla, México, February 13 2002.
(Invited plenary session presentation, 60 minutes)
- 11.042** “Microelectrónica” (*Microelectronics*), XL Week of Sciences, Universidad Autónoma de San Luis Potosí, San Luis Potosí, San Luis Potosí, México, March 21 2002.
(Invited plenary session presentation, 60 minutes)
- 11.043** “An Alternative Method to Determine Effective Channel Length and Parasitic Series Resistance of LDD MOSFET’s”, Fourth IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDCS2002), Aruba, April 17 2002.
(Simultaneous session presentation, 20 minutes.)
- 11.044** “Consequence of the Coupled Variables in Homotopic Simulation of Nonlinear Resistive Circuits”, Fourth IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDCS2002), Aruba, April 18 2002.
(Simultaneous session presentation, 20 minutes.)
- 11.045** “Engineering Education in Latin America needs to be Thoroughly Overhauled” Fourth IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDCS2002), Aruba, April 18 2002.
(Invited participation in Round Table, 150 minutes)
- 11.046** “La Educación Superior en Puebla: Características y Tendencias” (*Higher Education in Puebla: Traits and Trends*) Third Conference on Higher Education SEP-Puebla, Cholula, Puebla, México, April 26 2002.
(Invited participation in Round Table, 135 minutes)
- 11.047** “Formando Investigadores” (*Forming Researchers*) VIII Regional Encounter on Research and Education in Physics, BUAP, Puebla, Puebla, México, June 6 2002.
(Invited participation in Round Table, 150 minutes)
- 11.048** “Estado Actual y Perspectivas de los Postgrados en Ingeniería y Tecnología en México” (*Current State and Future of Graduate Programs in Engineering and Technology in México*), R. Murphy, XVI Nacional Graduate Studies Conference, Morelia, Michoacán, México, October 22 2001.
(Simultaneous session presentation, 10 minutes.)

- 11.049** “Estado de la Educación en Ingeniería y Tecnología en México” (*State of Engineering and Technology in México*), IEEE Latin-American CAS Tour 2000, INAOE, Tonantzintla, Puebla, México, November 20 2002.
(Invited participation in Round Table, 150 minutes)
- 2003** **11.050** “On the State of Electronic Engineering Education in México”, R. Murphy, Ibero American Summit on Engineering Education, Sao José dos Campos, Brazil, March 25 2003.
(Simultaneous session presentation, 20 minutes.)
- 11.051** “¿Es el Futuro la Especialización?” (*Is Specialization the Future?*) Third National Symposium on Optics in Industry, INAOE, Tonantzintla, Puebla, México, July 11 2003.
(Invited participation in Round Table, 120 minutes)
- 2004** **11.052** “Laboratorios Remotos para la Educación a Distancia en Electrónica” (*Remote Laboratorios for Distance Education in Electronics*), Fourth International Conference on Higher Education (UNIVERSIDAD 2004), Havana, Cuba, February 6 2004.
(Simultaneous session presentation, 15 minutes.)
- 11.053** “Formación de Posgrado en Microelectrónica y Microtecnologías, ¿Es Viable Compartir Recursos?”, (*Formation of Human Resources in Microelectronics and Microthechnologies, Is Sharing Resources Feasible?*), X International Iberchip Workshop, Cartagena, Colombia, March 12 2004.
(Invited participation in Round Table, 105 minutes)
- 11.054** “Diseño de Antenas” (*Antenna Design*), Fourth National Conference on Computer Systems, Universidad Cuauhtémoc, Puebla, Puebla, México, April 28, 2004.
(Invited participation in plenary session, 60 minutes)
- 11.055** “CEITEC and the Latin American Microelectronics Market Development”, Seminario Desafios da Microeletrônica: o papel do CEITEC, Porto Alegre, Brazil, June 1, 2004.
(Invited participation in Round Table, 120 minutes)
- 11.056** “Straightforward Determination of Small-Signal Model Parameters for Bulk RF-MOSFETs”, Fifth IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDCS2004), Punta Cana, Dominican Republic, November 3 2004.
(Simultaneous session presentation, 20 minutes.)

- 11.057** “Linearity in Two Optical Receiver Structures for High-Frequency Applications”, Fifth IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDCS2004), Punta Cana, Dominican Republic, November 4 2004.
(Simultaneous session presentation, 20 minutes.)
- 11.058** “Effects of the Low Temperature Annealing on the Transport Mechanisms in n-type a-SiGe:H/p-type c-Silicon Heterojunctions”, Fifth IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDCS2004), Punta Cana, Dominican Republic, November 4 2004.
(Simultaneous session presentation, 20 minutes.)
- 2005** **11.059** “Estado de los Programas de Postgrado en Ingeniería y Tecnología en México” (*On the State of Graduate Programs in Engineering and Technology in México*), National Forum on the Higher Education System, Pachuca, Hidalgo, México, October 11 2005.
(Simultaneous session presentation, 20 minutes.)
- 2006** **11.060** “Estado de los Programas de Postgrado en Ingeniería y Tecnología en México”, (*On the State of Graduate Programs in Engineering and Technology in México*), National Forum on the Higher Education System, México D.F., México, February 27 2006.
(Simultaneous session presentation, 20 minutes.)
- 2007** **11.061** “Nuevos Escenarios para el Posgrado”, (*New Scenarios for Graduate Studies*), XXI National Conference on Graduate Studies, Guadalajara, Jalisco, México, November 22, 2007.
(Invited participation in Round Table, 90 minutes)
- 2008** **11.062** “Perspectivas de Desarrollo de Jóvenes Investigadores en el País”, (*Perspectives for the development of Young Researchers in the Country*), VII Workshop for Syudents of Physics and Materials Science, Puebla, Puebla, México, March 13 2008.
(Invited participation in Round Table, 120 minutes)
- 11.063** “Modelado del Transistor MOS para Aplicaciones en Altas Frecuencias”, (*Modeling of the MOS Transistor for High-Frequency Applications*), Universidad Simón Bolívar, Caracas, Venezuela, June 19 2008.
(Invited plenary session presentation, 100 minutes)
- 2009** **11.064** “Metamaterial-Mems Reconfigurable Transmission Line”, 2009 International Iberchip Workshop (IWS2009), Buenos Aires, Argentina, March 27 2009.
(Simultaneous session presentation, 15 minutes)

- 11.065** “El Estado y Perspectivas de la Investigación en la Universidad Pública”, (*The State and Perspectives of Research in Public Universities*) First Forum of Research Results, Universidad Autónoma de Ciudad Juárez, Ciudad Juárez, Chihuahua, México, August 28 2009.
(Invited participation in Round Table, 120 minutes)
- 2010**
- 11.066** “El Estado Actual y Perspectivas del Postgrado en México”, (*The State and Perspectives of Graduate Studies in Mexico*), Universidad Autónoma de Tamaulipas, Ciudad Victoria, Tamaulipas, México, March 17 2010.
(Invited plenary session presentation, 90 minutes)
- 11.067** “Una Visión del Postgrado en México”, (*A Vision of Graduate Studies in Mexico*) Centro de Investigaciones Biológicas del Noroeste, La Paz, Baja California Sur, México, April 21 2010.
(Invited plenary session presentation, 60 minutes)
- 11.068** “El Estado Actual y Perspectivas del Postgrado en México”, (*The State and Perspectives of Graduate Studies in Mexico*), Universidad Autónoma de Baja California Sur, La Paz, Baja California Sur, México, April 21 2010.
(Invited plenary session presentation, 60 minutes)
- 11.069** “La Importancia de los Medios de Comunicación Modernos en el Posgrado”, (*The Importance of the Modern Means of Communication in Graduate Studies*), Universidad Autónoma del Estado de Hidalgo, Pachuca, México, May 20 2010.
(Invited participation in Round Table, 90 minutes)
- 11.070** “El impacto de la investigación educativa en el quehacer de las IES”, (*The Impact of Educational Research in the Daily Tasks of Institutions of Higher Learning*), Instituto Politécnico Nacional, México, D.F., México, May 28 2010.
(Invited participation in Round Table, 120 minutes)
- 11.071** “Evaluando Resultados de los programas de Apoyo a Becas de Posgrado” (*Evaluating the Results of the Graduate Studies Scholarship Program*), México, D.F., México, June 24, 2010.
(Invited participation in Round Table, 150 minutes)
- 11.072** “High Frequency Electronics”, Instituto Tecnológico Superior de Atlixco, Puebla, México, October 18, 2010.
(Invited plenary session presentation, 60 minutes)
- 2011**
- 11.073** “High Frequency Measurements: The Basics”, Universidade Federal de Santa Catarina, Florianópolis, Brazil, May 16, 2011.
(Invited plenary session presentation, 60 minutes)

- 11.074** “El PNPC y Paradigmas de Calidad en el Posgrado” (*The National Registry of Quality Graduate Programs and Quality Paradigms in Graduate Studies*), Guanajuato, Guanajuato, México, September 22, 2011.
(Invited participation in Round Table, 150 minutes)
- 2012**
- 11.075** “La Ingeniería en América Latina: Situación y Retos” (*Engineering in Latin America: Current State and Challenges*), Bogotá Colombia, August 15, 2012.
(Invited plenary session presentation, 60 minutes)
- 11.076** “La Situación de la Ingeniería en América Latina” (*The Situation of Engineering in Latin America*), Morelia, Michoacán, México, September 27, 2012.
(Simultaneous session presentation, 20 minutes)
- 11.077** “ISTEC’s Impact on the Development of Science and Technology Education in Latin America”, World Engineering Education Forum (WEEF 2012), Buenos Aires, Argentina, October 17, 2012.
(Simultaneous session presentation, 20 minutes)
- 11.078** “Overhauling Engineering Education in Latin America”, World Engineering Education Forum (WEEF 2012), Buenos Aires, Argentina, October 18, 2012.
(Simultaneous session presentation, 20 minutes)
- 2013**
- 11.079** “Design Considerations for Integrated Antennas used in High Frequency Applications”, R. Murphy, XIX International IBERCHIP Workshop, Cusco, Perú, February 27 2013.
(Simultaneous session presentation, 20 minutes)
- 11.080** “Tendencias Actuales y Visión de la Investigación en México” (*Current Trends and Vision of Research in Mexico*), R. Murphy, 6^{to} Coloquio Interdisciplinario de Doctorado, Universidad Popular Autónoma del Estado de Puebla, June 27, 2013.
(Invited plenary session presentation, 60 minutes)
- 11.081** “Relevancia de la Educación en Ingeniería para el Desarrollo de América Latina” (*Relevance of Engineering Education for the Development of Latin America*), R. Murphy, International Engineering Seminar, Universidad San Gil, Colombia, September 17, 2013, El Yopal, Casanare, Colombia; September 19 2013, San Gil, Santander, Colombia.
(Invited plenary session presentation, 90 minutes)

- 11.082** “Engineering Education for Development”, R. Murphy, International Engineering Seminar, Universidad San Gil, Colombia, September 17, 2013, El Yopal, Casanare, Colombia; September 19 2013, San Gil, Santander, Colombia.
(Invited participation in Round Table, 90 minutes)
- 11.083** “Antenas Integradas” (*Integrated Antennas*), R. Murphy, International Engineering Seminar, Universidad San Gil, Colombia, 18 September 2013, El Yopal, Casanare, Colombia; 20 September 2013, San Gil, Santander, Colombia.
(Invited plenary session presentation, 90 minutes)
- 11.084** “Understanding the Properties of RF-MOSFETs Using the Smith Chart”, R. Murphy, World Engineering Education Forum (WEEF 2013), Cartagena, Colombia, September 25, 2013.
(Simultaneous session presentation, 20 minutes)
- 11.085** “Relationship with the Environment: Innovation and Entrepreneurship”, R. Murphy, World Engineering Education Forum (WEEF 2013), Cartagena, Colombia, September 26, 2013.
(Invited participation in Round Table, 60 minutes)
- 2014** **11.086** “Antenas Integradas” (*Integrated Antennas*), R. Murphy, Universidad Veracruzana, Veracruz, Veracruz, México, October 31, 2014.
(Invited plenary session presentation, 90 minutes)
- 2015** **11.087** “Characterization of Semiconductor Devices in the High-Frequency Regime”, R. Murphy, IEEE Latin American Symposium on Circuits and Systems (LASCAS 2015), Montevideo, Uruguay, February 25, 2015.
(Tutorial Course, 180 minutes)
- 11.088** “A Bird’s-eye View of Microwave R&D in Latin America”, R. Murphy, IEEE International Microwave Symposium (IMS 2015), Phoenix, Arizona, USA, May 21, 2015.
(Simultaneous session presentation, 10 minutes)
- 11.089** “La Investigación en México, Realidad y Perspectiva” (*Research in Mexico, Reality and Perspective*), R. Murphy, Tercer Encuentro de Jóvenes Investigadores, Universidad de Colima, October 16, 2015.
(Invited plenary session presentation, 90 minutes)
- 11.090** “Sensores for Bio-Medical Applications”, R. Murphy, Coloquio de la Sociedad de Dispositivos Electrónicos de IEEE, Universidad Javeriana, Bogotá, Colombia, October 20, 2015.
(Invited plenary session presentation, 90 minutes)

- 11.091** “Sensores for Bio-Medical Applications”, R. Murphy, Cuarto Congreso Internacional de Instrumentación, Control y Telecomunicaciones y Primer Congreso Internacional en Diseño, Fabricación y Nuevos Materiales, Universidad Santo Tomás, Tunja, Colombia, October 22, 2015.
(Invited plenary session presentation, 90 minutes)
- 11.092** “Antenna Design”, R. Murphy, Cuarto Congreso Internacional de Instrumentación, Control y Telecomunicaciones y Primer Congreso Internacional en Diseño, Fabricación y Nuevos Materiales, Universidad Santo Tomás, Tunja, Colombia, October 23, 2015.
(Tutorial Course, 270 minutes)
- 11.093** “La Necesidad de Fomentar la Investigación de Alto Impacto en América Latina” (*The Need to Foster High-Impact Research in Latin America*), R. Murphy, Tercer Encuentro Grupos de Investigación, Universidad Distrital Francisco José de Caldas, Bogotá, Colombia, November 18, 2015.
(Invited plenary session presentation, 90 minutes)
- 2016** **11.094** “Sensors for Bio-Medical Applications”, R. Murphy, XXVI Simposium Internacional Tecnológica, Instituto Tecnológico de Morelia, Michoacán, México, April 21, 2015.
(Invited plenary session presentation, 60 minutes)
- 11.095** “Characterization of the MOS Transistor in the High-Frequency Regime”, R. Murphy, Universidade Federal do Santa Maria, Brazil, May 9, 2016.
(Invited plenary session presentation, 90 minutes)
- 11.096** “Characterization of the MOS Transistor in the High-Frequency Regime”, R. Murphy, Universidade Federal do Rio Grande do Sul, Brazil, May 12, 2016.
(Invited plenary session presentation, 75 minutes)
- 11.097** “An Overview of RF and Microwave Engineering Research Collaboration between Latin America and the Rest of the World”, R. Murphy, 46th European Microwave Conference (EuMWC 2016), London, England, October 6, 2016.
(Simultaneous session presentation, 20 minutes)
- 2017** **11.098** “A Versatile, CMOS Compatible, Integrated Antenna for Millimeter-Wave Applications”, R. Murphy, 2017 Latin American Symposium on Circuits and Systems (LASCAS 2017), Bariloche, Argentina, February 22, 2017.
(Simultaneous session presentation, 20 minutes)

- 11.099** “The Global Impact of Electrical and Computer Engineering in Society. Case in Point: Latin America”, R. Murphy, 2017 ECEDHA Conference, Miramar Beach, Florida, USA, March 18, 2017.
(Invited participation in Round Table, 90 minutes)
- 11.100** “General Overview of the Use of Sensors in the Life-Sciences”, R. Murphy, UPAEP, Puebla, April 6, 2017.
(Invited plenary session presentation, 60 minutes)
- 11.101** “The Importance of Scientific Work”, R. Murphy, INAOE, Tonantzintla, Puebla, Mexico, May 11, 2017.
(Invited plenary session presentation, 60 minutes)
- 11.102** “Antenas for Wireless Communications and other Applications”, R. Murphy, UPAEP, Puebla, Puebla, Mexico, June 30, 2017.
(Invited plenary sesión presentation, 30 minutes)
- 11.103** “Antennas in Integrated Circuits”, R. Murphy, University of Guadalajara, Jalisco, Mexico, August 23, 2017.
(Plenary sesión presentation, 60 minutes)
- 11.104** “Integrated Antennas”, R. Murphy, Iberoamerican University, Puebla, Puebla, Mexico, October 5, 2017.
(Plenary sesión presentation, 60 minutes)
- 2018** **11.105** “High Frequency Device Characterisation Laboratory at the “Instituto Nacional de Astrofísica, Óptica y Electrónica (INAOE)”, Tonantzintla, Puebla, México”, R. Murphy, 48th European Microwave Conference, Madrid, España, September 26, 2018.
(Invited simultaneous session presentation, 20 minutes)
- 11.106** “Panorama de la Investigación Científica en América Latina” (*An Overview of Scientific Research in Latin America*), R. Murphy, International Conference “The Influence of Technology in Knowledge Communities”, La Paz, Bolivia, October 12, 2018.
(Invited plenary sesión presentation, 60 minutes)
- 11.107** “Some Considerations Regarding the Modeling and Characterization of Bulk CMOS Devices for High-Frequency Applications”, R. Murphy, 2018 IEEE 13th Nanotechnology Materials and Devices Conference (NMDC), Portland, Oregon, EUA, October 15, 2018.
(Invited simultaneous session presentation, 30 minutes)
- 11.108** “Integrated Antennas: Past, Present and Future”, R. Murphy, EDS Distinguished Lecturer Conference, Universidad Pontificia Bolivariana, Medellín, Colombia, October 18, 2018.
(Invited plenary sesión presentation, 90 minutes)

- 11.109** “Integrated Antennas: Past, Present and Future”, R. Murphy, Workshop on Engineering Applications (WEA’18), Medellín, Colombia, October 18, 2018.
(Invited plenary sesión presentation, 90 minutes)
- 11.110** “Integrated Antennas: Past, Present and Future”, R. Murphy, National Micro and Nanoelectronics Conference (nano MX 2018), Puebla, México, October 26, 2018.
(Invited plenary sesión presentation, 60 minutes)
- 2019**
- 11.111** “Fundamental Aspects of CMOS RF Modeling and Characterization”, R. Murphy, Hyderabad IEEE EDS Mini Colloquium, Hyderabad, India, February 24, 2019.
(Invited plenary sesión presentation, 60 minutes)
- 11.112** “Characterization of Semiconductor Devices in the High-Frequency Regime”, R. Murphy, MOS-AK India 2019, Hyderabad, India, February 25, 2019.
(Invited Tutorial Course, 180 minutes)
- 11.113** “RF Electrical Characterization”, R. Murphy, ESSDERC/ESSCIRC 2019, Krakow, Poland, September 23, 2019.
(Invited Tutorial Course, 45 minutes)
- 11.114** “Characterization of Semiconductor Devices in the High-Frequency Regime”, R. Murphy, MOS-AK San Francisco, December 11, 2019.
(Invited Plenary sesión presentation, 30 minutes)
- 2020**
- 11.115** “Introduction to 5G technology, is it harmful?”, R. Murphy, virtual session in the First Cycle of Conferences of the "Sociedad de Ciencia, Tecnología e Investigación Juvenil de México AC", June 20, 2020.
(Invited plenary sesión presentation, 60 minutes)
- 11.116** “The Importance of Science”, R. Murphy, virtual session in the cycle “*Martes de Ciencia con el INAOE*” July 21, 2020.
(Plenary session presentation, 60 minutes)
- 11.117** “Integrated Antennas”, R. Murphy, virtual session for the *Universidad Centroamericana de Nicaragua*, October 3, 2020.
(EDS DL Invited plenary sesión presentation, 60 minutes)
- 11.118** “Life After the Early Bird”, R. Murphy, virtual session for the World Week on Space, October 6, 2020.
(Invited plenary sesión presentation, 60 minutes)

- 11.119** “Some issues on the high-frequency compact modeling of CMOS transistors and related devices”, R. Murphy, virtual talk during the 13th International MOS-AK Workshop, Silicon Valley, California, USA, December 10, 2020.
(Invited plenary session presentation, 30 minutes)
- 2021** **11.120** “The 5G Network”, R. Murphy, virtual talk for the Instituto Tecnológico de Orizaba, March 23 2021.
(Invited plenary session presentation, 60 minutes)
- 11.121** “Modeling Issues for CMOS RF ICs”, R. Murphy, virtual talk during the 3rd MOS-AK/LADEC Workshop, April 18 2021.
(Invited plenary session presentation, 60 minutes)
- 11.122** “The 5G Network: Myths and Realities”, R. Murphy, virtual talk in the cycle *Tuesdays of Science with the INAOE*, June 15 2021.
(Plenary Session, 60 minutes)
- 11.123** “Modeling Passive Devices for RF CMOS Circuits”, R. Murphy, virtual talk during the 28th International Conference “Mixed Design of Integrated Circuits and Systems”, June 26 2021.
(Invited plenary session presentation, 30 minutes)
- 11.124** “The 5G Network: Myths and Realities”, R. Murphy, virtual conference for the graduate students in electronics and communications of the CICESE, September 29 2021.
(Invited plenary session presentation, 60 minutes)
- 11.125** “Integrated Antennas”, R. Murphy, virtual talk for the Instituto Tecnológico de Orizaba, October 13 2021.
(Invited plenary session presentation, 60 minutes)
- 11.126** “Sistemas Satelitales”, R. Murphy, virtual talk for the Instituto Tecnológico de Orizaba, November 23 2021.
(Invited plenary session presentation, 60 minutes)
- 11.127** “Modeling integrated passive components for high frequency applications”, R. Murphy, virtual talk during the 2nd National Conference on Micro and Nanoelectronics (nanoMX2021), December 2 2021.
(Invited plenary session presentation, 60 minutes)
- 11.128** “Compact Modeling of through-silicon-vias with different ground configurations”, R. Murphy, virtual talk during the 14th International MOS-AK Workshop, Silicon Valley, California, USA, December 17 2021.
(Invited plenary session presentation, 30 minutes)

- 2022**
- 11.129** “The need for antenna compact models”, R. Murphy, virtual talk during the Latin American Spring MOS-AK Workshop, Puebla, Puebla, México, April 29 2022.
(Plenary talk, 30 minutes)
- 11.130** “Further Considerations on RF CMOS Compact Modeling”, R. Murphy, virtual talk during the 4th MOS-AK/LAEDC Workshop, Puebla, Puebla, Mexico, July 3, 2022.
(Plenary talk, 30 minutes)
- 11.131** “Metamaterial-based Antennas for On-chip Applications in the Millimeter-Wave Range”, R. Murphy, AP-S/URSI 2022, Denver, Colorado, EUA, July 13, 2022.
(Simultaneous presentation, 20 minutes)
- 11.132** “Characterization and Modeling the MOS Transistor and Passive Devices for HF Operation”, R. Murphy, virtual talk during the EDS Summer School in Silchar, Assam, India, August 20, 2022.
(Invited keynote presentation, 60 minutes)
- 11.133** “Satellite Technology”, R. Murphy, during the “Jornada del Conocimiento 2022” at the Centro de Bachillerato Tecnológico Industrial y de Servicios # 16, Atlixco, Puebla, Mexico, October 19, 2022.
(Invited science popularization talk, 60 minutes)
- 11.134** “Evolution of Satellite Technology”, R. Murphy, Instituto Tecnológico de Morelia, Morelia, Michoacán, Mexico, November 8, 2022.
(Invited talk, 60 minutes)
- 11.135** “Semiconductor Devices and Passive Components Characterization for High Frequency Applications”, R. Murphy, 2022 IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2022), Ixtapa, Guerrero, Mexico, November 9, 2022.
(Invited keynote presentation, 60 minutes)
- 11.136** “Modeling of Integrated Antennas”, R. Murphy, 14^a Semana BEIFI y Proyectos de Investigación, ESIME Culhuacán, CDMX, Mexico, November 28, de 2022.
(Invited plenary session presentation, 45 minutes)
- 11.137** “Active and Passive Devices for High-Frequency Applications”, R. Murphy, during the CASS Tour México 2022, Universidad de Guadalajara and ITESO, Guadalajara, Mexico, November 29, 2022.
(Invited plenary session presentation, 45 minutes)

- 11.138** “Modeling of Integrated Antennas”, R. Murphy, during the CASS Tour México 2022, Universidad Veracruzana, Veracruz, Mexico, December 2, 2022.
(Invited plenary session presentation, 45 minutes)
- 2023** **11.139** “Satellites”, R. Murphy, virtual talk in the cycle *Tuesdays of Science with the INAOE*, March 28, 2023.
(Plenary Session, 60 minutes)
- 11.140** “Integrated Antennas: The Future of Electronics”, R. Murphy, during the CASS Tour México 2023, Universidad de Monterrey, Monterrey, Nuevo León, Mexico, April 17, 2023.
(Invited plenary session presentation, 45 minutes)
- 11.141** “Integrated Antennas: The Future of Electronics”, R. Murphy, during the CASS Tour México 2023, Universidad Michoacana de San Nicolás de Hidalgo, Morelia, Michoacan, Mexico, April 19, 2023.
(Invited plenary session presentation, 45 minutes)
- 11.142** “Issues on the Modeling of Semiconductor Devices in RF”, R. Murphy, during the CASS Tour Mexico 2023, Universidad Veracruzana, Veracruz, Veracruz, Mexico, April 21, 2023.
(Invited plenary session presentation, 45 minutes)
- 11.143** “Microelectronics Education”, R. Murphy, during the CASS Tour Mexico 2023, Universidad Veracruzana, Veracruz, Veracruz, México, April 21, 2023.
(Invited participation in Round Table, 120 minutes)
- 11.144** “Resonance Related Fluctuations on Experimental Characteristic Impedance Curves for PCB and On-Chip Transmission Lines”, R. Murphy, International Microwave Symposium (IMS 2023), San Diego, California, USA, June 14, 2023.
(Invited simultaneous talk, 20 minutes)
- 11.145** “Satellites”, R. Murphy, Science popularization talk in the “Verano de la Investigación Científica” program, Tonantzintla, Puebla, México, June 22, 2023.
(Invited talk, 60 minutes)
- 11.146** “Second order aspects of characteristic impedance determination”, R. Murphy, 5th International MOS-AK/LAEDC Workshop, Puebla, Puebla, México, July 2, 2023.
(Invited talk, 30 minutes)

- 11.147** “Determination of the Relative Permittivity and Loss Tangent of Liquid Samples Using a Miniature Low-Cost Microwave Sensor”, R. Murphy, Latin American Microwave Conference, San José, Costa Rica, December 7, 2023.
(Plenary session, 20 minutes)
- 11.148** “Some efforts toward the modeling of integrated antennas”, R. Murphy, MOS-AK Workshop, Santa Clara, CA, USA, December 13, 2023.
(Invited plenary session presentation, 45 minutes)
- 2024** **11.149** “Modeling On-Chip Antennas”, R. Murphy, Seminar of the Electronics Department, INAOE, January 30, 2024.
(Plenary session, 60 minutes)
- 11.150** “Antennas in Integrated Circuits”, R. Murphy, Series of Conferences in the ITP-INAOE Week 2024, March 5, 2024.
(Invited plenary session presentation, 60 minutes)
- 11.151** “Antennas for High Frequency Communications”, R. Murphy, talk in the frame of the “Summer of Scientific Research”, Tonantzintla, Puebla, México, July 18, 2024.
(Invited science popularization talk, 60 minutes)
- 11.152** “Transcendence of Science”, R. Murphy, Universidad Iberoamericana Puebla, October 3, 2024.
(Plenary session, 60 minutes)
- 2025** **11.153** “A 28 GHz Double Patch Double Beam Antenna with Circular Polarization for Energy Harvesting”, R. Murphy, 2025 IEEE MTT-S Latin America Microwave Conference (LAMC), San Juan, Puerto Rico, USA, January 23, 2025.
(Plenary session, 20 minutes)
- 11.154** “Modified Koch Fractal Antenna for IoT Applications in Smart Homes”, R. Murphy, 2025 IEEE MTT-S Latin America Microwave Conference (LAMC), San Juan, Puerto Rico, USA, January 23, 2025.
(Plenary session, 20 minutes)
- 11.155** “The importance of fostering science and technology in Mexico”, R. Murphy, science popularization conference for undergraduate students during the program of visits to the institute, INAOE, March 7 2025.
(Science popularization talk, 60 minutes)
- 11.156** “A brief history of Electronics”, R. Murphy, virtual talk in the frame of the “Martes de Ciencia con el INAOE” program, June 10, 2025.

- (Science popularization talk, 60 minutes)
- 11.157** “The benefits of scientific activity”, R. Murphy, science popularization conference for high-school students during the program of visits to the institute, INAOE, June 13 2025.
(Science popularization talk, 60 minutes)
- 11.158** “Mixed Mode: More than Analog and Digital”, R. Murphy, Mixdes 2025, Szczecin, Poland, June 26, 2025.
(Invited plenary session presentation, 35 minutes)
- 11.159** “Impedance and resonance measurements in transmission lines and chips”, R. Murphy, virtual talk during the international conference "CAS LEGACY - 17 years", organized by the IEEE CASS student branch from the School of Electrical and Electronics Engineering at the Universidad Nacional de Ingeniería (UNI), Lima, Perú, July 25, 2025.
(Invited plenary session presentation, 60 minutes)
- 11.160** “Why study a scientific major”, R. Murphy, INAOE, September 2025.
(Science popularization talk, 60 minutes)

12.- CITATIONS

- 1990** **12.001** To work No.: 10.2. In: Master's Thesis, Sotero Fuentes, INAOE, pp. 72, 1990.
- 1991** **12.002** To work No.: 10.2. In: Master's Thesis, Federico Sandoval, INAOE, pp. 16. 1991.
- 12.003** To work No.: 8.2. In: "Circuito Integrado para la Caracterización de Materiales, Procesos y Dispositivos" (*An Integrated Circuit for the Characterization of Materials, Processes and Devices*), J. De la Hidalga, M. Linares, P. Peykov, Proceedings of ELECTRO-91, pp. 797, 1991.
- 12.004** To work No.: 6.4. In: "Circuito Integrado para la Caracterización de Materiales, Procesos y Dispositivos" (*An Integrated Circuit for the Characterization of Materials, Processes and Devices*), J. De la Hidalga, M. Linares, P. Peykov, Proceedings of ELECTRO-91, pp. 800, 1991.
- 12.005** To work No.: 10.2. In: "Diseño de Circuitos Integrados Utilizando La Biblioteca de Celdas Estándar Digitales y el Proceso ECMOS I" (*Design of Integrated Circuits using the Digital Standard Cell Library and the ECMOS I Process*), S. Fuentes, T. Flores, T. León, M. Aceves, J. Palomino, Technical Report # 130, INAOE, 1991., pp. 66.
- 1993** **12.006** To work No.: 10.2. In: "Circuito Sumador Completo MOS: Una Revisión" (*MOS Complete Adding Circuit: A Review*), F. Sandoval, A. Juárez, Proceedings of the IV International Conference on Electronics, Communications and Computers CONIELECOM UDLA'93, Universidad de las Américas, Cholula, Puebla México. April 1993, pp. 460.
- 1996** **12.007** To work No.: 6.14. In: "Performance and Reliability Aspects of FOND: A New Deep Submicron CMOS Device Concept", R. Bellens, G. Van den bosch, J.P. Miéville, G. Badenes, A. Clerix, G. Groeseneken, L. Deferm, H. Maes, IEEE Transactions on Electron Devices, Vol. 43, No. 9, September 1996, pp. 1407-1415.
- 1997** **12.008** To work No.: 5.6. In: "Letters to the Editor", Noel Artilles-León, Quality Engineering, Vol. 9, No. 1, March 1997, pp. xi-xii.
- 1998** **12.009** To work No.: 6.14. In: "A Comprehensive Closed-Form Model for the Quantized Accumulation Layer in MOS Structures", V. Kol'dyaev, G. Van Den Bosch, L. Deferm, Solid State Electronics, Vol. 42, No. 1, January 1998, pp. 50.

- 12.010** To work No.: 10.3. In: “Design for High-Frequency Integrated Circuits Using CMOS and BiCMOS Technologies”, Ma. Flora Carreto Castro, Doctoral Dissertation, INAOE, February 1998, pp. 53, 54, 56, 60, 61, 62.
- 12.011** To work No.: 6.14. In: “A Possible Mechanism for Reconciling Large Gate-Drain Overlap Capacitance with a Small Difference Between Polysilicon Gate Length and Effective Channel Length in an Advanced Technology PFET”, R. Young, L. Su, M. Jeong, S. Kapur, IEEE Electron Device Letters, Vol. 19, No. 7, July 1998, pp. 234.
- 2000** **12.012** To work No. 10.3 In: “Low Temperature Electronics: Physics, Devices, Circuits and Applications”, E. Gutiérrez, M.J. Deen, C. Claeys (editors), Academic Press, San Diego, California, USA, 2000, pp. 119.
- 12.013** To work No. 6.18 In: “Low Temperature Electronics: Physics, Devices, Circuits and Applications”, E. Gutiérrez, M.J. Deen, C. Claeys (editors), Academic Press, San Diego, California, USA, 2000, pp. 140.
- 12.014** To work No. 10.4 In: “El Memristor como Elemento Básico de Circuito” (*The Memristor as a Basic Circuit Element*), R. Enríquez, A. Gallardo, Proceedings of the XV Conference on Instrumentation, SOMI XV, Paper No. ELE-15, 1999, pp. 2.
- 12.015** To work No. 5.7 In: “1.7 GHz Bipolar Optoelectronic Receiver Using Conventional 0.8 μ m BiCMOS Process”, G. Halkias, N. Haralabidis, E.D. Kyriakis-Bitzaros, S. Katsafouros, Proceedings of the IEEE International Symposium on Circuits and Systems ISCAS 2000, May 2000, pp. V-417.
- 12.016** To work No. 6.14 In: “Novel Techniques for Data Retention and L_{eff} Measurements in Two Bit MicroFlash Memory Cells”, Y. Roizin, A. Yankelevich, Y. Netzer, Proceedings of the AIP Conference on Characterization and Metrology for ULSI Technology 2000, June 2000, pp. 182.
- 2001** **12.017** To work No. 5.7 In: “Design of a 1.8GHz Low-Noise Amplifier for RF Front-End in a 0.8 μ m CMOS Technology”, S. Park, W. Kim, IEEE Transactions on Consumer Electronics, Vol. 47, No. 1, February 2001, pp. 10-15.

- 12.018** To work No. 10.4 In: “Fabricación y Caracterización de Guías de Onda Coplanares en Silicio con SiO₂ y SRO con R₀=20 y 30” (*Fabrication and Characterization of Coplanar Waveguides on Silicon Using SiO₂ y SRO with R₀=20 y 30*), M. Herrera, M.Sc. Thesis, INAOE, 2001, pp. 34.
- 12.019** To work No. 10.4 In: “Fabricación y Caracterización de Guías de Onda Coplanares en Silicio con SiO₂ y SRO con R₀=10 y 20” (*Fabrication and Characterization of Coplanar Waveguides on Silicon Using SiO₂ y SRO with R₀=10 y 20*), L.E. Sánchez, M.Sc. Thesis, INAOE, 2001, pp. 25.
- 12.020** To work No.5.7 In: “Etude et réalisation de circuits convoyers de courant de second génération en technologie BiCMOS. Application à l’amplification RF réglable”, F. Seguin, Doctoral Dissertation, University of Burdeos, France, December 14 2001, pp. 226-227.
- 2002** **12.021** To work No. 10.3 In: “Análisis de Circuitos con CADENCE PSpice” (*Circuit Analysis with CADENCE PSpice*), David Báez López, Alfaomega Grupo Editor, México DF, 2002, ISBN 970-15-0780-0, pp. 104.
- 12.022** To work No. 5.7 In: “Complementary VHF CMOS Active Inductor”, A. Thanachayanont, S.S. Ngow, Proceedings of the ITC-CSCC 2002, July 2002, pp. 345.
- 12.023** To work No. 5.7 In: “Class AB VHF CMOS Active Inductor”, A. Thanachayanont, S.S. Ngow, Proceedings of the IEEE Midwest Symposium on Circuits and Systems MWSCAS 2002, August 2002, Vol. I, pp. 64-67.
- 12.024** To work No. 5.7 In: “Low Voltage High-Q VHF CMOS Transistor-Only Active Inductor”, A. Thanachayanont, S.S. Ngow, Proceedings of the IEEE Midwest Symposium on Circuits and Systems MWSCAS 2002, August 2002, Vol. III, pp. 552-555.
- 12.025** To Work No. 6.14 In: “A New Physical Modeling of Parasitic Capacitances of Deep-Submicron LDD MOSFETs”, F. Prégaldiny, C. Lallement, D. Mathiot, Proceedings of the 2002 European Solid State Device Research Conference (ESSDERC 2002), September 2002, pp. 1-4.
- 12.026** To Work No. 5.7 In: “CMOS Transistor-Only Active Inductor for IF/RF Applications”, A. Thanachayanont, Proceedings of the IEEE International Conference on Industrial Technology (ICIT 2002), Vol. 2, December 2002, pp. 1209-1212.

- 12.027** To Work No. 6.14 In: "A Simple Efficient Model of Parasitic Capacitances of Deep-Submicron LDD MOSFETs", Prégaldiny, F., Lallement, C., Mathiot, D., Solid-State Electronics, Vol. 46, No. 12, December 2002, pp. 2191-2198.
- 2003** **12.028** To Work No. 5.7 In: "Single Chip 1.8 GHz Band Pass LNA with Temperature Self-Compensation", D. Zito, L. Fanucci, B. Neri, S. Di Pascoli, G. Scandurra, Proceedings of the International Symposium on Signals, Circuits and Systems 2003 (SCS 2003), Vol. 1., July 2003 pp. 121-124.
- 12.029** To Work No. 10.6 In: "Charge Trapping Phenomenon in Al/SRO/Al on Si Structure by Lateral Electrical Stress", Z. Yu, M. Aceves, Superficies y Vacío, Vol. 16, No. 4, December 2003, pp. 25-29.
- 12.030** To Work No. 5.10 In: "Inter- and Intra-Chip Wireless Interconnection", L. Xuejun, Bachelor's Thesis, Nanyang Technological University, Singapur, December 2003, pp. 1-126.
- 12.031** To Work No. 6.14 In: "Étude et modélisation du comportement électrique des transistors MOS fortement submicroniques", Prégaldiny, F., Doctoral Dissertation, Université Louis Pasteur, Strasburgo, Francia, December 2003, pp. 1-199.
- 2004** **12.032** To Work No. 5.7 In: "A Gain-Controllable Wide-Band Low-Noise Amplifier in Low-Cost 0.8- μ m Si BiCMOS Technology", F. Seguin, B. Godara, F. Alicalapa, A. Fabre, IEEE Transactions on Microwave Theory and Techniques, Vol. 52, No. 1, January 2004, pp. 158.
- 12.033** To Work No. 6.37 In: "Design of Silicon-Based Suspended Inductors for UHF Applications", F. Sandoval, L. Flores, Proceedings of the XIV International Conference on Electronics, Communications and Computers (CONIELECOMP 04), February 2004, pp. 228-234.
- 12.034** To Work No. 6.37 In: "Technological Considerations for Designing Bulkless Inductors for High-Frequency Applications", F. Sandoval, L. Flores, Proceedings of the X International Iberchip Workshop, March 2004, pp. 186-193.
- 12.035** To Work No. 5.10 In: "Small-Signal Modeling of RF CMOS", Doctoral Dissertation, Jaejune Jang, Stanford University, August 2004.

- 12.036** To Work No. 5.12 In: "Response to Comments on "A Direct Extraction Technique for a Small-Signal MOSFET Equivalent Circuit with Substrate Parameters", S. Lee, Microwave and Optical Technology Letters, Vol. 43, No. 3, September 2004, pp. 269.
- 12.037** To Work No. 5.10 In: "Analysis of Effective Gate Resistance Characteristics in Nano-Scale MOSFET for RFIC", H.S. Yun, S. Lim, J.H. Ahn, H.D. Lee, Journal of the Institute of Electronics Engineers of Korea, Semiconductors and Devices, Vol. 41, No. 11, November 2004, pp. 965-970.
- 2005** **12.038** To Work No. 6.46 In: "Effects of Technology and Dimensional Scaling on Input Loss Prediction of RF MOSFETs", T. Das, C. Washburn, P.R. Mukund, S. Howard, K. Paradis, J.G. Jang, J. Kolnik, J. Burleson, Proceedings of the 18th International IEEE Conference on VLSI Design, January 2005, pp. 295-300.
- 12.039** To Work No. 5.11 In: "Simulation of the Contribution of Magnetic Films on Planar Inductors Characteristics", E. Gamet, J.P. Chatelon, T. Rouiller, B. Bayard, G. Noyel, J. Rousseau, Journal of Magnetism and Magnetic Materials, Vol. 288, March 2005, pp. 121-129.
- 12.040** To Work No. 6.46 In: "Accurate Performance Prediction of Multi-GHz CML with Data Run-Length Variations", S.R. Bandi, C. Washburn, P.R. Mukund, J. Kolnik, M. Liu, K. Paradis, S. Howard, J. Burleson, Proceedings of the IEEE International Symposium on Circuits and Systems 2005 (ISCAS 2005), Kobe, Japan, May 23-26 2005, pp. 5103-5106.
- 12.041** To Work No. 5.13 In: "Solar Cells Based On a-Si_{0.80}Ge_{0.20}:H Amorphous Films", B.A. Najafov, Ukrainian Journal of Physics, Vol. 50, No. 5, May 2005, pp. 483-488.
- 12.042** To Work No. 10.6 In: "Study of Carrier Transport Mechanisms in Au/(Si/SiO₂)/p-Si Structure", K.B. Zhang, S.Y. Ma, Electronic Components & Materials, Vol. 24, No. 7, July 2005, pp. 56-60.
- 12.043** To Work No. 5.12 In: "An Analytical Parameter Extraction of the Small-Signal Model for RF MOSFETs", Y.S. Chi, J.X. Lu, S.Y. Zhang, Z.J. Wu, F.Y. Huang, Proceedings of the 2005 IEEE Conference on Electron Devices and Solid-State Circuits, China, December 19-21 2005, pp. 555-558.

- 2006** **12.044** To Work No. 5.10 In: “Characterization and Modeling for 0.13 μ m RF MOSFETs”, C. Yusong, H. Fengyi, W. Zhongjie, Z. Shaoyong, K. Xiaoming, W. Zhigong, Chinese Journal of Semiconductors, Vol. 27, No. 2, February 2006, pp. 373-376.
- 12.045** To Work No. 6.46 In: “Effect of Gate Poly-Silicon Depletion on MOSFET Input Impedance”, S.R. Bandi, C. Washburn, P.R. Mukund, J. Kolnik, K. Paradis, S. Howard, J. Burleson, IEEE Microwave and Wireless Components Letters, Vol. 16, No. 5, May 2006, pp. 290-292.
- 12.046** To Work No. 5.10 In: “United States Patent 7038523, Voltaje Trimming Circuit”, J. Suh, J.P. Kim, granted on May 2 2006.
- 12.047** To Work No. 6.46 In: “A Universal Common-Source and Common-Drain Model for 1-20GHz Frequency Range”, S.S. Sridharan, S.R. Bandi, C. Washburn, P.R. Mukund, J. Kolnik, K. Paradis, S. Howard, J. Burleson, Memoria Técnica del 2006 IEEE International Symposium on Circuits and Systems, ISCAS 2006, May 2006, pp. 3313-3316.
- 12.048** To Work No. 5.10 In: “Fabrication of T-Shaped Gate Diamond Metal-Insulator-Semiconductor Field Effect Transistors”, K. Hirama, S. Miyamoto, H. Matsudaira, H. Umezawa, H. Kawarada, Japanese Journal of Applied Physics, Vol. 45, No. 7, July 2006, pp. 5681-5684.
- 12.049** To Work No. 5.17 In: “Embedded Test Circuit and Method for Radio Frequency (RF) Systems-on-a-Chip (SOCS)”, J.S. Yoon, Doctoral Dissertation, University of Florida, EUA, July 2006.
- 12.050** To Work No. 6.46 In: “Universal MOSFET Gate Impedance Model for 200 MHz—20 GHz Frequency Range”, S.R. Bandi, C. Washburn, P.R. Mukund, J. Kolnik, K. Paradis, S. Howard, J. Burleson, Solid State Electronics, Vol. 50, No. 8, August 2006, pp. 1450-1460.
- 12.051** To Work No. 5.13 In: “A Compact Equivalent Circuit for the Dark Current-Voltage Characteristics of Nonideal Solar Cells”, J. Pallarès, R. Cabré, L.F. Marsall, Journal of Applied Physics, Vol. 100, No. 8, October 2006, pp. 084513-1-084513-5.
- 12.052** To Work No. 6.46 In: “A New Substrate Network Model and Parameter Extraction for RF Nano-CMOS”, G.B. Choi, S.H. Hong, H.S. Kang, Y.H. Jeong, IEEE Nanotechnology Materials and Devices Conference, 2006 (NMDC 2006), 22-25 Oct. 2006 Vol. 1, pp. 508 – 509.

- 12.053** To Work No. 5.12 In: “A New Substrate Network Model and Parameter Extraction for RF Nano-CMOS”, G.B. Choi, S.H. Hong, H.S. Kang, Y.H. Jeong, IEEE Nanotechnology Materials and Devices Conference, 2006 (NMDC 2006), 22-25 Oct. 2006 Vol. 1, pp. 508 – 509.
- 12.054** To Work No. 6.50 In: “Accurate Modeling and Extraction Methodology for RF-MOSFET Valid Up to 40GHz”, J. Liu, X.J. Xu, L.L. Sun, 8th International Conference on Solid-State and Integrated Circuit Technology (ICSICT 2006), Shanghai, China, October 23-26 2006, pp. 1339-1342.
- 12.055** To Work No. 5.17 In: “Accurate Modeling and Extraction Methodology for RF-MOSFET Valid Up to 40GHz”, J. Liu, X.J. Xu, L.L. Sun, 8th International Conference on Solid-State and Integrated Circuit Technology (ICSICT 2006), Shanghai, China, October 23-26 2006, pp. 1339-1342.
- 12.056** To Work No. 5.17 In: “Improving the Accuracy of the De-Embedding Methods for On-Wafer RF Measurements”, M. Drakaki, A. Hatzopoulos, S. Siskos, Proceedings of the XXI Conference on Design of Circuits and Integrated Systems (DCIS2006), Barcelona, Spain, November 2006, pp.144-1-144-5.
- 2007** **12.057** To Work No. 5.17 In: “RF-CMOS Modeling: RF-MOSFET Modeling for Low Power Applications”, L. Jun, S. Lingling, X. Xiaojun, Chinese Journal of Semiconductors, Vol. 28, No. 1, January 2007, pp. 131-137.
- 12.058** To Work No. 5.17 In: “RF-CMOS Modeling: Parasitic Analysis for MOST On-Wafer Test Structure”, L. Jun, S. Lingling, X. Xiaojun, Chinese Journal of Semiconductors, Vol. 28, No. 2, February 2007, pp. 246-251.
- 12.059** To Work No. 5.17 In: “Multiport Measurement Method Using a Two-Port Network Analyzer With Remaining Ports Unterminated”, D.G. Kam, J. Kim, IEEE Microwave and Wireless Components Letters, Vol. 17, No. 9, September 2007, pp. 694-696.
- 12.060** To Work No. 5.13 In: “Band Offsets and Transport Mechanisms of Hydrogenated Nanocrystalline Silicon/Crystalline Silicon Heterojunction Diode: Key Properties for Device Applications”, J.J. Lu, J. Chen, Y.L. He, W.Z. Shen, Journal of Applied Physics, Vol. 102, No. 6, September 2007, pp. 063701-1-063701-7.

- 12.061** To Work No. 5.13 In: "Solar Energy Converters Based on a-Si_{0.80} Ge_{0.20}: H Films", B.A. Najafov, V.R. Figarov, International Journal of Sustainable Energy, Vol. 26, No. 3, September 2007, pp. 149-157.
- 2008**
- 12.062** To Work No. 5.12 In: "Development of RF High-Power Diamond MOSFETs with High-Density Hole Channel", K. Hirama, Doctoral Dissertation, Waseda University, Japan, February 2008.
- 12.063** To Work No. 5.13 In: "Determining Band Offset and Interface Charge Density of Hydrogenated Nanocrystalline Silicon / Crystalline Silicon Heterojunction Diode by C-V Matching Method", J.J. Lu, Z.Z. Jiang, J. Chen, Y.L. He, W.Z. Shen, Proceedings of SPIE, Vol. 6984, Article Number 69840B, March 2008.
- 12.064** To Work No. 5.10 In: "RF-Extraction Methods for MOSFET Series Resistances: A Fair Comparison", J.C. Tinoco, J.P. Raskin, Proceedings of the Seventh International Caribbean Conference on Devices, Circuits and Systems, April 2008, pp. 1-6.
- 12.065** To Work No. 5.7 In: "CMOS Active Inductors and Transformers", F. Yuan, Springer-Verlag, ISBN 0387764771, June 2008.
- 12.066** To Work No. 5.12 In: "High-Frequency FET Modeling in GaN with Dispersion Effects", M. Morgensen, Master's Thesis, North Carolina State University, September 2008.
- 12.067** To Work No. 6.50 In: "An Approach for Determining MOSFET Small-signal Circuit Model Parameters", Q. Wang, C. Yuan, Y. Huang, J. Gao, Microwave Journal, Vol. 51, No. 10, October 2008, pp. 116-123.
- 12.068** To Work No. 5.17 In: "Small Signal and Noise Equivalent Circuit for CMOS 65 nm up to 110 GHz", N. Waldhoff, C. Andrei, D. Gloria, F. Danneville, G. Dambrine, Proceedings of the 38th European Microwave Conference, October 2008, pp. 321-324.
- 12.069** To Work No. 5.12 In: "Revised RF Extraction Methods for Deep Submicron MOSFETs", J.C. Tinoco, J.P. Raskin, Proceedings of the 3rd European Microwave Integrated Circuits Conference, October 2008, pp. 321-324.
- 12.070** To Work No. 5.17 In: "A Comparative Evaluation of De-Embedding Methods for On-Wafer RF CMOS Inductor S-Parameters Measurements", M. Drakaki, A. Hatzopoulos, S. Siskos, Physica Status Solidi (c), Vol. 5, No. 12, December 2008, pp. 3671-3676.

- 12.071** To Work No. 5.17 In: "A General Statistical Equivalent-Circuit-Based De-Embedding Procedure for High Frequency Measurements", M. Ferndahl, C. Fager, K. Andersson, P. Linnér, H.O. Vikes, H. Zirath, IEEE Transactions on Microwave Theory and Techniques, Vol. 56, No. 12, December 2008, pp. 2692-2700.
- 12.072** To Work No. 5.14 In: "Modeling and Noise Parameter Extraction of Nano-Wire Transistors", D. Pallavi, Master's Thesis, San Jose State University, December 2008.
- 2009**
- 12.073** To Work No. 5.17 In: "Five-Step (Pad-Pad Short-Pad Open-Short-Open) De-Embedding Method and Its Verification", I.M. Kang, S.J. Jung, T.H. Choi, J.H. Jung, C. Chung, H.S. Kim, H. Oh, H.W. Lee, G. Jo, Y.K. Kim, H.G. Kim, K.M. Choi, IEEE Electron Device Letters, Vol. 30, No. 4, April 2009, pp. 398-400.
- 12.074** To Work No. 5.17 In: "Improved Characterization Methodology for MOSFETs up to 220GHz", N. Waldhoff, C. Andrei, D. Gloria, S. Lepilliet, F. Danneville, G. Dambrine, IEEE Transactions on Microwave Theory and Techniques, Vol. 57, No. 5, May 2009, pp. 1237-1243.
- 12.075** To Work No. 5.17 In: "De-Embedding Method for On-Wafer RF CMOS Inductor Measurements", M. Drakaki, A. A. Hatzopoulos, S. Siskos, Microelectronics Journal, Vol. 40, No. 6, June 2009, pp. 958-965.
- 12.076** To Work No. 5.17 In: "Scalable Small-Signal Modeling of RF CMOS FET Based On 3-D EM-Based Extraction of Parasitic Effects", G. Jung, W. Choi, Y. Kwon, Proceedings of the IEEE MTT-S International Microwave Symposium, June 2009, pp. 873-876.
- 12.077** To Work No. 5.17 In: "Multi-Line TRL Calibration Compared to a General De-Embedding Method", M. Ferndahl, K. Andersson, C. Fager, Proceedings of the 2009 Microwave Measurement Conference, ARFTG 09, June 2009, pp. 1-5.
- 12.078** To Work No. 5.10 In: "Effects of Multigate-Feeding Structure on the Gate Resistance and RF Characteristics of 0.1- μm Metamorphic High Electron-Mobility Transistors", J.H. Oh, M. Han, S.J. Lee, B.C. Jun, S.W. Moon, J.S. Lee, J.K. Rhee, S.D. Kim, IEEE Transactions on Microwave Theory and Techniques, Vol. 57, No. 6, June 2009, pp. 1487-1493.

- 12.079** To Work No. 10.5 In: “Procedimientos Endoscópicos en Gastroenterología/ Endoscopic Procedures in Gastroenterology”, J.A. Córdova, A. De la Torre, Editorial Médica Panamericana, August 2009.
- 12.080** To Work No. 5.12 In: “New RF Extrinsic Resistances Extraction Procedure for Deep-Submicron MOS Transistors”, J.C. Tinoco, J.P. Raskin, International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, September 2009, pp. 1-20.
- 12.081** To Work No. 5.10 In: “Comparative Analysis of VDMOS/LDMOS Power Transistors for RF Amplifiers”, N. Chevaux, M.M. De Souza, IEEE Transactions on Microwave Theory and Techniques, Vol. 57, No. 11, November 2009, pp. 2643-2651.
- 12.082** To Work No. 5.17 In: “Deembedding Accuracy for Device Scale and Interconnection Line Parasitics”, J. Lee, J. Lee, J. Jeon, H.S. Jhon, H. Shin, IEEE Microwave and Wireless Components Letters, Vol. 19, No. 11, November 2009, pp. 713-715.
- 12.083** To Work No. 5.17 In: “Scalable Small-Signal Modeling of RF CMOS FET Based On 3-D EM-Based Extraction of Parasitic Effects and Its Application to Millimeter-Wave Amplifier Design”, W. Choi, G. Jung, J. Kim, Y. Kwon, IEEE Transactions on Microwave Theory and Techniques, Vol. 57, No. 12, December 2009, pp. 3345-3353.
- 2010** **12.084** To Work No. 6.55 In: “Crosstalk Noise Voltage of Coupling RC Interconnects with Temperature Distribution”, W. Zeng, D. Gang, Y. Yintang L. Jianwei, Chinese Journal of Electronics, Vol. 19, No. 1, January 2010, pp. 43-47.
- 12.085** To Work No. 5.17 In: “Rapid Modeling and Efficient Characterization of Shielded Oval-Shaped Spiral Inductors”, I. Alam, P. Papadopoulos, S. Stefanou, K. Nikellis, Proceedings of the 2010 Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems (SiRF), January 2010, pp. 29-32.
- 12.086** To Work No. 5.6 In: “Statistical Methods for Engineers, Third Edition”, G. Vining, S.M. Kowalsky, Cengage Learning, ISBN 0-538-73723-9 (978-0-538-73723-4) January 2010, pp. 489, 509.
- 12.087** To Work No. 5.10 In: “New RF Intrinsic Parameters Extraction Procedure for Advanced MOS Transistors”, J.C. Tinoco, A. G. Martínez-López, M. Emam, J.P. Raskin, Proceedings of the 2010 IEEE International Conference on Microelectronic Test Structures, March 22-25 2010, Hiroshima, Japón, pp. 86-89.

- 12.088** To Work No. 5.12 In: “Microwave and Millimeter Wave Technologies: from Photonic Bandgap Devices to Antenna and Applications” Chapter 9: “Advanced RF MOSFET’s for microwave and millimeter wave applications: RF characterization issues”, J.C. Tinoco, J.P. Raskin, In-Tech, India, March 2010, ISBN 978-953-7619-66-4, pp. 205-230.
- 12.089** To Work No. 5.17 In: “A 2.4 GHz Ultra-Low-Power Low-Noise-Amplifier”, N.K. Midtflå, Master’s Thesis, Norwegian University of Science and Technology, June 2010.
- 12.090** To Work No. 5.12 In: “Nanoscale CMOS: Innovative Materials, Modeling and Characterization”, F. Balestra (editor), John Wiley & Sons, ISBN 978-1-84821-180-3, July 2010, pp. 611.
- 12.091** To Work No. 5.12 In: “A Scalable Model of RF MOSFET Source and Drain Resistances for RFIC Design”, Y. Yu, L. Sun, J. Liu, Chinese Journal of Electron Devices, Vol. 33, No. 4, August 2010, pp. 428-432.
- 12.092** To Work No. 5.17 In: “RF Modeling of Through Silicon Vias (TSVs) in 3D IC”, C.W. Luo, Y.C. Wu, J.J. Wang, S.S.H. Hsu, Extended Abstracts of the 2010 International Conference on Solid State Devices and Materials, September 22-24, Tokyo, Japan, pp. 239-240.
- 12.093** To Work No. 5.12 In: “Accurate Small Signal Modeling and Extraction of Silicon MOSFET for RF IC Application”, Y. Tang, L. Zhang, Y. Wang, Solid State Electronics, Vol. 54, No. 11, November 2010, pp. 1312-1318.
- 12.094** To Work No. 5.17 In: “Accurate Small Signal Modeling and Extraction of Silicon MOSFET for RF IC Application”, Y. Tang, L. Zhang, Y. Wang, Solid State Electronics, Vol. 54, No. 11, November 2010, pp. 1312-1318.
- 12.095** To Work No. 5.17 In: “Wide Band and Noise Characterization of Various MOSFETs for Optimized Use in RF Circuits”, M. Emam, Doctoral Dissertation, Université Catholique de Louvain, November 2010.
- 12.096** To Work No. 5.11 In: “Contribution à la Réalisation d’une Micro-Inductance Planaire”, Allassem Désiré, Tesis Doctoral, Université Jean Monnet de Saint-Étienne, November 2010.

- 12.097** To Work No. 5.17 In: “De-Embedding Transmission Lines Using a Full-Wave EM-Simulated Pad Model”, C.H.J Poh, D.C. Howard, P. Cheng, J.D. Cressler, J. Papapolymerou, Proceedings of 2010 Asia Pacific Microwave Conference, December 2010, pp. 1208-1211.
- 2011** **12.098** To Work No. 5.10 In: “Mobility Degradation and Transistor Asymmetry Impact on Field Effect Transistor Access Resistances Extraction”, J. Tinoco, A. Martínez, J. Raskin, Solid State Electronics, Vol. 56, No. 1, January 2011, pp. 214-218.
- 12.099** To Work No. 5.17 In: “Conversion Efficiency Enhancement of Millimeter-Wave Optoelectronic Mixers for Fiber-Fed Wireless System”, J.Y. Kim, Tesis Doctoral, Yonsei University, January 2011.
- 12.100** To Work No. 6.050 In: “Performance Limits of RF Power CMOS”, U. Gogineni, Tesis Doctoral, Massachusetts Institute of Technology, February 2011.
- 12.101** To Work No. 6.050 In: “Bias-Dependent Small-Signal Modeling Based on Neuro-Space Mapping for MOSFET”, S. Li, J. Cheng, B. Han, J. Gao, International Journal of RF and Microwave Computer Aided Engineering, Vol. 21, No. 2, March 2011, pp. 182-189.
- 12.102** To Work No. 5.17 In: “Silicon High Frequency Test Structures Improvement for Millimeter Wave Varactors Characterization, Optimization and Modeling”, F. Sonnerat, R. Debroucke, Y. Morandini, D. Gloria, J.D. Arnould, Proceedings of 24th International Conference on Microelectronic Test Structures, April 2011, pp. 101-104 .
- 12.103** To Work No. 6.062 In: “A New Design for Rotational, Tunable Wideband RF MEMS Capacitors”, J. Pagazani, P. Nicole, L. Rousseau, F. Marty, G. Lissorgues, Microsystem Technologies, Vol. 17, No. 4, April 2011, pp. 513-522.
- 12.104** To Work No. 6.050 In: “Neural-Space Mapping-Based Large-Signal Modeling for MOSFET”, S. Li, X. Li, J. Gao, International Journal of RF and Microwave Computer Aided Engineering, Vol. 21, No. 3, May 2011, pp. 353-362.
- 12.105** To Work No. 5.17 In: “Small Signal and HF Noise Performance of 45 nm CMOS Technology in mmW Range”, L. Poulain, N. Waldhoff, D. Gloria, F. Danneville, G. Dambaine, Proceedings of 2011 IEEE Radio Frequency Integrated Circuits Symposium (RFIC), June 2011, pp. 1-4.

- 12.106** To Work No. 5.17 In: “Modeling a SCR-Based Protection Structure for RF-ESD Co-Design Simulations”, A. Romanescu, P. Ferrari, J.D. Arnould, P. Fonteneau, C.A. Legrand, Proceedings of 2011 IEEE MTT-S International Microwave Symposium, June 2011, pp. 1-4.
- 12.107** To Work No. 6.050 In: “RF MOSFET DC Modeling Technique Based on GaAs STATZ Model”, J. Cheng, B. Han, S. Li, G. Zhai, L. Sun, J. Gao, Semiconductor Technology, Vol. 36, No. 8, August 2011, pp. 591-595.
- 12.108** To Work No. 5.17 In: “SiGe HBT BiCMOS RF Front-Ends for Radar Systems”, Tesis Doctoral, J Chung Hang Poh, Georgia Institute of Technology, December 2011.
- 12.109** To Work No. 5.17 In: “Layout Optimization for RF Performance Enhancement in 90-nm Low-Power NMOS”, W. Zheng, W. Li, J. Liu, L. Sun, Chinese Journal of Electron Devices, Vol. 34, No. 6, December 2011, pp. 645-648.
- 2012** **12.110** To Work No. 5.17 In: “Comparison of SOS MOSFET’s Equivalent Circuit Parameters Extracted From LCR Meter and VNA Measurement”, K. Bertling, A.D. Rakic, Y.T. Yeow, A. Brawley, H. Domyo, F.M. Rotella, IEEE Transactions on Electron Devices, Vol. 59, No. 1, January 2012, pp. 20-24.
- 12.111** To Work No. 5.12 In: “Modeling Inductive Behavior of MOSFET Scattering Parameter S_{22} in the Breakdown Regime”, C.I. Lee, W.C. Lin, Y.T. Lin, IEEE Transactions on Microwave Theory and Techniques, Vol. 60, No. 3, March 2012, pp. 502-508.
- 12.112** To Work No. 5.11 In: “Frequency Characteristics of Octagonal Spiral Planar Inductor”, J.W. Kim, Journal of the Korea Academia-Industrial Cooperation Society, Vol. 13, No. 3, March 2012, pp. 1284-1287.
- 12.113** To Work No. 6.050 In: “An Improved and Simple Parameter Extraction Method and Scaling Model for RFMOSFETs up to 40GHz”, J. Cheng, B. Han, S. Li, G. Zhai, L. Sun, J. Gao, International Journal of Electronics, Vol. 99, No. 5, May 2012, pp. 707-718.
- 12.114** To Work No. 5.21 In: “RF Compact Modeling of High-Voltage MOSFETs”, A. Bazigos, F. Krummenacher, J.M. Sallese, M. Bucher, E. Seebacher, IETE Journal of Research, Vol. 58, No. 3, May-June 2012, pp. 214-221.

- 12.115** To Work No. 6.050 In: “Modeling and Extraction Technique for Parasitic Resistances in MOSFETs Combining DC I-V and Low Frequency C-V Measurements”, J.S. Shin, H. Bae, E. Hong, J. Jang, D. Yun, J. Lee, D.H. Kim, D.M. Kim, Solid State Electronics, Vol. 72, June 2012, pp. 78-81.
- 12.116** To Work No. 5.07 In: “On the Possibility of Using CMOS Active Inductors for Telecommunications Filters Implementations”, C. Andriesei, V. Maftai, L. Goras, F. Temcamani, B. Delacressonniere, Buletinul Institutului Politehnic din Iași, Vol. LVIII, No. 2, June 2012, pp. 43-52.
- 12.117** To Work No. 5.17 In: “Nonlinear Transistor Model Parameter Extraction Techniques”, M. Rudolph, C. Fager, D.E. Root (Editors), Cambridge University Press, 2012, ISBN 978-0-521-76210-6.
- 12.118** To Work No. 5.17 In: “On the De-Embedding Issue of Millimeter-Wave and Sub-Millimeter-Wave Measurement and Circuit Design”, B. Zhang, Y.Z. Xiong, L. Wang, S. Hu, J.L.W. Li, IEEE Transactions on Components, Packaging and Manufacturing Technology, Vol. 2, No. 8, August 2012, pp. 361-369.
- 12.119** To Work No. 5.17 In: “On-Chip Power Supply Noise: Scaling, Suppression and Detection”, T. Karim, Tesis Doctoral, Universidad de Waterloo, Waterloo, Canadá, August 2012.
- 12.120** To Work No. 5.17 In: “A Study of STI Stress Impact on DC Performance of Nano-scale NMOS”, Y.J. Yu, W.J. Li, X. Fang, Proceedings of the IEEE 11th International Conference on Solid-State and Integrated Circuit Technology (ICSICT), November 2012, pp. 830-832.
- 2013** **12.121** To Work No. 5.21 In: “Revisiting MOSFET Threshold Extraction Methods”, A. Ortiz, F. García, J. Muci, A. Terán, J.J. Liou, C.S. Ho, Microelectronics Reliability, Vol. 53, No. 1, January 2013, pp. 90-104.
- 12.122** To Work No. 5.17 In: “A Comprehensive Review on Microwave FinFET Modeling for Progressing Beyond the State of Art”, G. Crupi, D.M.M. Schreurs, J.P. Raskin, A. Caddemi, Solid State Electronics, Vol. 80, February 2013, pp. 81-95.
- 12.123** To Work No. 5.11 In: “Conception, Réalisation et Caractérisation d’Inductance Planaires a Couches Magnétiques”, Yaya Dagal Dari, Tesis Doctoral, Université Jean Monnet de Saint-Étienne, March 2013.

- 12.124** To Work No. 5.17 In: “Novel Extraction Method for Source and Drain Series Resistances in Silicon Nanowire Metal-Oxide-Semiconductor Field-Effect-Transistors Based on Radio-Frequency Analysis”, K.R. Kim, S. Shin, S. Cho, J.H. Lee, M. Kang, Japanese Journal of Applied Physics, Vol. 52, No. 4, April 2013, pp. 04CC14-1-04CC14-4.
- 12.125** To Work No. 6.062 In: “Scalable Design of an IMS Cross-Flow Micro-Generator/Ion Detector”, J.J. Ortiz, C. Nigri, C. Lasorsa, Journal of Micromechanics and Microengineering, Vol. 23, No. 4, April 2013, pp. 1-8.
- 12.126** To Work No. 5.20 In: “Transient Sensitivity of Sectorial Split-Drain Magnetic Field-Effect Transistor”, Z. Yang, S.L. Siu, W.S. Tam, C.W. Kok, C.W. Leung, P.T. Lai, H. Wong, P.W.T. Pong, IEEE Transactions on Magnetics, Vol. 49, No. 7, July 2013, pp. 4048-4051.
- 12.127** To Work No. 5.09 In: “Passive Inductors in Silicon: A Design Proposal”, O. Nolasco, F. Sandoval, E. Ortega, J. Gurrola, Proceedings of the 2013 IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC), November 2013, pp. 1-6.
- 12.128** To Work No. 5.17 In: “Passive Inductors in Silicon: A Design Proposal”, O. Nolasco, F. Sandoval, E. Ortega, J. Gurrola, Proceedings of the 2013 IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC), November 2013, pp. 1-6.
- 12.129** To Work No. 5.11 In: “Fabrication and Characterization of Micro-Inductors Deposited on Magnetic Thin and Thick Layers”, A. Desiré, A. Kriga, M. Youssouf, A. Siblini, J.P. Chatelon, M.F. Blanc-Mignon, B. Payet-Gervy, A. Piot, D. Dufeu, J.J. Rousseau, Advanced Electromagnetics, Vol. 2, No. 3, December 2013, pp. 44-50.
- 2014** **12.130** To Work No. 5.17 In: “A Broadband Model Over 1-220 GHz for GSG Pad Structures in RF CMOS”, J. Liu, Z. Yu, L. Sun, IEEE Electron Device Letters, Vol. 35, No. 7, July 2014, pp. 696-698.
- 12.131** To Work No. 5.17 In: “Step-by-Step Implementation of an Amplifier Circuit with Graphene Field-Effect Transistor on a Printed-Circuit Board”, J. Lee, J. Lee, D.H. Seo, H. Shin, S. Park, H.J. Chung, Current Applied Physics, Vol. 14, No. 8, August 2014, pp. 1057-1062.

- 12.132** To Work No. 5.10 In: “Extraction of Gate Resistance in Sub-100-nm MOSFETs with Statistical Verification”, X. Chen, M.K. Tsai, C.H. Chen, R. Lee, D.C. Chen, IEEE Transactions on Electron Devices, Vol. 61, No. 9, September 2014, pp. 3111-3117.
- 12.133** To Work No. 5.24 In: “An Equivalent Circuit Model of CNT Inkjet Printed Paper-Based Structures”, C. Paragua, K. Frigui, S. Bila, D. Baillargeat, S. Pacchini, Proceedings of the 44th European Microwave Conference, October 2014, pp. 528-531.
- 12.134** To Work No. 5.22 In: “Modeling Slow-Wave CPWs on Silicon up to 60 GHz”, C. Yao, W.J. Zhang, F. Lin, Proceedings of the 12th IEEE International Conference on Solid State and Integrated Circuit Technology (ICSICT2014), October 2014, pp. 1-3.
- 12.135** To Work No. 5.12 In: “Efficient RF Extrinsic Parameters Extraction Technique for FinFETS”, D. Maafrri, M.C.E. Yagoub, R. Touhami, A. Slimane, M.T. Belaroussi, Microwave and Optical Technology Letters, Vol. 56, No. 11, November 2014, pp. 2616-2619.
- 12.136** To Work No. 5.11 In: “Development of Computer-Aided Approach to Parameter Extraction of Spiral Inductor Model”, E.D. Gadjeva, Annual Journal of Electronics, Vol. 8, November 2014, pp. 116-119.
- 12.137** To Work No. 5.10 In: “A Reliable Extraction Method for Source and Drain Series Resistances in Silicon Nanowire Metal-Oxide-Semiconductor Field-Effect-Transistors (MOSFETs) Based on Radio-Frequency Analysis”, J.H. Seo, Y.J. Yoon, H.G. Lee, G.M. Yoo, E.S. Cho, S. Cho, J.H. Lee, I.M. Kang, Journal of Nanoscience and Nanotechnology, Vol. 14, No. 11, November 2014, pp. 8219-8224.
- 12.138** To Work No. 5.22 In: “An Efficient Model for the On-Chip CPWs in GaAs Technology”, F. Fu, X. Wang, J. Liu, L. Sun, Proceedings of IEEE International Conference on Communication Problem-Solving (ICCP 2014), December 2014, pp. 477-479.
- 12.139** To Work No. 5.21 In: “Impact of Channel Doping and Gate Length on Small Signal Behaviour of Gate Electrode Workfunction Engineered Silicon Nanowire MOSFET at THz Frequency”, N. Gupta, A. Kumar, R. Chaujar, Proceedings of Fifth International Symposium on Electronic System Design, December 2014, pp. 192-196.

- 2015** **12.140** To Work No. 5.17 In: “A Simple and Accurate Pad-Thru-Short Deembedding Method Based on Systematic Analysis for RF Device Characterization”, C.I. Lee, W.C. Lin, IEEE Transactions on Electron Devices, Vol. 62, No. 1, January 2015, pp. 94-101.
- 12.141** To Work No. 5.12 In: “An Accurate Parameter Extraction Method for RF LDMOSFET Small-Signal Model”, W. Song, J. Fu, Y. Wang, W. Zhou, W. Zhang, J. Cui, Y. Zhao, G. Li, Z. Liu, Proceedings of the 2015 IEEE International Wireless Symposium, April 2015, pp. 1-4.
- 12.142** To Work No. 5.17 In: “An Improved Cascade-Based Noise De-Embedding Method for On-Wafer Noise Parameter Measurements”, C.I. Lee, W.C. Lin, Y.T. Lin, IEEE Electron Device Letters, Vol. 36, No. 4, April 2015, pp. 291-293.
- 12.143** To Work No. 5.21 In: “Determination of Source-and-Drain Series Resistance in 16-nm-Gate FinFET Devices”, P.H. Su, Y. Li, IEEE Transactions on Electron Devices, Vol. 62, No. 5, May 2015, pp. 1663-1667.
- 12.144** To Work No. 5.25 In: “An Active Metamaterials Antenna Controlled by RF-MEMS Switches”, Y. Luo, Z. Han, K. Kikuta, T. Takahashi, A. Hirose, H. Fujita, H. Toshiyoshi, Proceedings of the 18th International Conference on Solid-State Sensors, Actuators and Microsystems, Transducers 2015, June 2015, pp. 303-306.
- 12.145** To Work No. 5.17 In: “Resistance Analysis and Device Design Guideline for Graphene RF Transistors”, S.K. Hong, S.C. Jeon, W.S. Hwang, B.J. Cho, 2D Materials, Vol. 2, July 2015, pp. 1-7.
- 12.146** To Work No. 5.25 In: “Radio-Frequency Silicon-Based CMOS-Compatible MEMS Variable Solenoid Micro-Fluidic Inductor with Galinstan-Based Continuously-Adjustable Turn-Ratio Technique”, F. Banitorfian, F. Eshghabadi, A.A. Manaf, N.M. Noh, M.T. Mustaffa, Proceedings of the 6th Asia Symposium on Quality Electronic Design, August 2015, pp. 90-93.
- 12.147** To Work No. 5.11 In: “Frequency Characteristics for the Layers Distance of Double-Layer Spiral Planar Inductors”, J.W. Kim, International Journal of Applied Engineering Research, Vol. 10, No. 13, August 2015, pp. 33711-33713.

- 12.148** To Work No. 5.12 In: “Efficient Small-Signal Extraction Technique for Ultra-Thin Body and Ultra-Thin Box FD-SOI Transistor”, D. Maafri, M.C.E. Yagoub, R. Touhami, A. Slimane, M.T. Belaroussi, J.P. Raskin, Proceedings of the 2015 IEEE MTT-S International Conference on Numerical Electromagnetic and Multiphysics Modeling and Optimization (NEMO), Ottawa, Canada, August 11-14 2015, pp. 1-3.
- 12.149** To Work No. 5.12 In: “A New Method for Accurate Extraction of Source Resistance and Effective Mobility in Nanoscale Multifinger nMOSFETs”, J.C. Guo, Y.Z. Lo, IEEE Transactions on Electron Devices, Vol. 62, No. 9, September 2015, pp. 3004-3011.
- 12.150** To Work No. 5.17 In: “Modeling and Applications of Millimeter-Wave Slow-Wave Coplanar Coupled Lines in CMOS”, D. Parveg, A. Vahdati, M. Varonen, D. Karaca, M. Kärkkäinen, K.A.I. Halonen, Proceedings of the 10th European Microwave Integrated Circuits Conference, September 2015, pp. 207-210.
- 12.151** To Work No. 6.38 In: “Effective Device Electrical Parameter Extraction of Nanoscale FinFETs: Challenges and Results”, A. Leonhardt, L.F. Ferreira, S. Bampi, L.T. Manera, Proceedings of the 27th International Conference on Microelectronics (ICM 2015), December 2015, pp. 71-74.
- 12.152** To Work No. 5.24 In: “Mécanismes Physiques et Fondements Théoriques de la Récupération d’Energie Micro-Ondes Ambiante pour les Dispositifs sans Fil À Faible Consommation”, Carlos Henrique Petzl Lorenz, Master’s Thesis, Universidad de Montreal, Canadá, December 2015.
- 2016** **12.153** To Work No. 5.7 In: “ g_m -boosted flat gain UWB low noise amplifier with active inductor-based input matching network”, A. Saberhari, S. Kazemi, V. Shirmohammadli, M.C.E. Yagoub, Integration, the VLSI Journal, Vol. 52, No. 1, January 2016, pp. 323-333.
- 12.154** To Work No. 5.12 In: “Assessment of 28nm UTBB FD-SOI technology platform for RF applications: Figures of merit and effect of parasitic elements”, B. Kazemi Esfeh, V. Kilchytska, V. Barral, N. Planes, M. Haond, D. Flandre, J.P. Raskin, Solid State Electronics, Vol. 117, March 2016, pp. 130-137.
- 12.155** To Work No. 5.12 In: “A Novel Approach to Extracting Extrinsic Resistances for Equivalent Circuit Model of Nanoscale MOSFET”, P. Yu, Y. Zhou, L. Sun, J. Gao, International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, Vol. 29, No. 4, April 2016, pp. 1-11.

- 12.156** To Work No. 5.17 In: “Complete Model for CMOS Transistors up to 66 GHz”, Y. Hao, Y. Wu, C. Zhao, H. Liu, K. Kang, 2016 IEEE International Workshop on Electromagnetics: Applications and Student Innovation Competition (iWEM), May 2016, pp. 1-3.
- 12.157** To Work No. 5.28 In: “RF Modeling of FDSOI Transistors Using Industry Standard BSIM-IMG Model”, P. Kushwaha, S. Khandelwal, J.P. Duarte, C. Hu, Y.S. Chauhan, IEEE Transactions on Microwave Theory and Techniques, Vol. 64, No. 6, June 2016, pp. 1745-1751.
- 12.158** To Work No. 5.24 In: “Physical Mechanism and Theoretical Foundation of Ambient RF Power Harvesting Using Zero-Bias Diodes”, C. Lorenz, S. Hemour, K. Wu, IEEE Transactions on Microwave Theory and Techniques, Vol. 64, No. 7, July 2016, pp. 2146-2158.
- 12.159** To Work No. 5.10 In: “On the Series Resistance in Staggered Amorphous Thin Film Transistors”, A. Cerdeira, M. Estrada, L.F. Marsal, J. Pallares, B. Iñiguez, Microelectronics Reliability, Vol. 63, No. 8, August 2016, pp. 325-335.
- 12.160** To Work No. 5.27 In: “The Large World of FET Small-Signal Equivalent Circuits (Invited Paper)”, G. Crupi, A. Caddemi, D. Schreurs, G. Dambrine, International Journal of RF and Microwave Computer-Aided Engineering, Vol. 26, No. 9, September 2016, pp. 749-762.
- 12.161** To Work No. 5.28 In: “The Large World of FET Small-Signal Equivalent Circuits (Invited Paper)”, G. Crupi, A. Caddemi, D. Schreurs, G. Dambrine, International Journal of RF and Microwave Computer-Aided Engineering, Vol. 26, No. 9, September 2016, pp. 749-762.
- 12.162** To Work No. 5.31 In: “The Large World of FET Small-Signal Equivalent Circuits (Invited Paper)”, G. Crupi, A. Caddemi, D. Schreurs, G. Dambrine, International Journal of RF and Microwave Computer-Aided Engineering, Vol. 26, No. 9, September 2016, pp. 749-762.
- 12.163** To Work No. 5.15 In: “Solution-Route Low-Temperature Fabrication of Thin-Film p-n Junctions”, G. Panamá, K. Ayag, H. Kim, Semiconductor Science and Technology, Vol. 31, No. 9, September 2016, pp. 1-9.
- 12.164** To Work No. 5.11 In: “Characterization of Flexible Radio-Frequency Spiral Inductors on a Plastic Substrate”, G. Qin, H. Liu, Y. Xu, M. Dang, J. Ma, Z. Ma, X. Chen, T. Luo, IEICE Electronics Express, Vol. 13, No. 20, October 2016, pp. 1-12.

- 12.165** To Work No. 5.32 In: "A Comparative Overview of Electronic Devices Reliability Prediction Methods-Applications and Trends", F.O. Ehiagwina, T.O. Adewunmi, E.O. Seluwa, O.O. Kehinde, N.S. Abubakar, *Majlesi Journal of Electrical Engineering*, Vol. 5, No. 4, December 2016, pp. 129-137.
- 2017** **12.166** To Work No. 5.11 In: "Frequency Characteristics for Solenoid Planar Inductor", J.W. Kim, *Information*, Vol. 20, No. 2(B), February 2017, pp. 1341-1348.
- 12.167** To Work No. 5.30 In: "Novel Method to Determine Base Resistance in SiGe HBT from Small-Signal S-Parameters Measurement", Y. Sun, J. Fu, Y. Wang, W. Zhou, X. Li, Y. Shi, *Microwave and Optical Technology Letters*, Vol. 59, No. 3, March 2017, pp. 555-560.
- 12.168** To Work No. 5.17 In: "Enhanced performance in graphene RF transistors via advanced process integration", S.K. Hong, J.G. Oh, W.S. Hwang, B.J. Cho, *Semiconductor Science and Technology*, Vol. 32, No. 3, March 2017, pp. 1-7.
- 12.169** To Work No. 5.37 In: "A biocompatible and flexible polyimide for wireless sensors", E. Herth, K. Guerchouche, L. Rousseau, L. Calvet, C. Loyez, *Microsystems Technologies*, Vol. 23, No. 3, March 2017, pp. 1-9.
- 12.170** To Work No. 5.33 In: "Impact of Access Resistance on New-Y Function Methodology for MOSFET Parameter Extraction in Advanced FD-SOI Technology", J.B. Henry, A. Cros, J. Rosa, Q. Raffay, G. Ghibaudo, *Memoria Técnica de 2017 International Conference on Microelectronic Test Structures*, March 2017, pp. 4.3.1-4.3.5.
- 12.171** To Work No. 5.07 In: "Clock Distribution on Standing Wave with CMOS Active Inductor Loading", J. Yang, *Tesis Doctoral*, Northeastern University, EUA, April 2017.
- 12.172** To Work No. 5.20 In: "A Simple Drain Current Model for MOS Transistors with the Lorentz Force Effect", H.C. Chow, P. Chatterjee, W.S. Feng, *Sensors*, 17, 1199, May 2017, pp. 1-11. doi:10.3390/s17061199.
- 12.173** To Work No. 5.24 In: "Modeling and Link Performance Analysis of Busbar Distribution Systems for Narrowband PLC", Z. Hasirci, I.H. Cavdar, M. Ozturk, *Radioengineering*, Vol. 26, No. 2, June 2017, pp. 611-620.

- 12.174** To Work No. 5.33 In: “Caracterización de la Variabilidad Dependiente del Tiempo de MOSFETs Ultraescalados para su Modelado Compacto”, Miquel Moras Alberó, Doctoral Dissertation, Universitat Autònoma de Barcelona, Barcelona, España, June 2017.
- 12.175** To Work No. 5.32 In: “Caracterización de la Variabilidad Dependiente del Tiempo de MOSFETs Ultraescalados para su Modelado Compacto”, Miquel Moras Alberó, Doctoral Dissertation, Universitat Autònoma de Barcelona, Barcelona, España, June 2017.
- 12.176** To Work No. 6.050 In: “Caracterización de la Variabilidad Dependiente del Tiempo de MOSFETs Ultraescalados para su Modelado Compacto”, Miquel Moras Alberó, Doctoral Dissertation, Universitat Autònoma de Barcelona, Barcelona, España, June 2017.
- 12.177** To Work No. 5.17 In: “Caracterización de la Variabilidad Dependiente del Tiempo de MOSFETs Ultraescalados para su Modelado Compacto”, Miquel Moras Alberó, Doctoral Dissertation, Universitat Autònoma de Barcelona, Barcelona, España, June 2017.
- 12.178** To Work No. 5.26 In: “Caracterización de la Variabilidad Dependiente del Tiempo de MOSFETs Ultraescalados para su Modelado Compacto”, Miquel Moras Alberó, Doctoral Dissertation, Universitat Autònoma de Barcelona, Barcelona, España, June 2017.
- 12.179** To Work No. 6.076 In: “Caracterización de la Variabilidad Dependiente del Tiempo de MOSFETs Ultraescalados para su Modelado Compacto”, Miquel Moras Alberó, Doctoral Dissertation, Universitat Autònoma de Barcelona, Barcelona, España, June 2017.
- 12.180** To Work No. 5.31 In: “Caracterización de la Variabilidad Dependiente del Tiempo de MOSFETs Ultraescalados para su Modelado Compacto”, Miquel Moras Alberó, Doctoral Dissertation, Universitat Autònoma de Barcelona, Barcelona, España, June 2017.
- 12.181** To Work No. 5.28 In: “Caracterización de la Variabilidad Dependiente del Tiempo de MOSFETs Ultraescalados para su Modelado Compacto”, Miquel Moras Alberó, Doctoral Dissertation, Universitat Autònoma de Barcelona, Barcelona, España, June 2017.

- 12.182** To Work No. 5.31 In: “A Novel Small-Signal Model for Bulk FinFETs Accommodating Self-Heating Behaviors”, J. Liu, K. Ren, L. Sun, Z. Yu, IEEE Electron Device Letters, Vol. 38, No. 7, July 2017, pp. 839-842.
- 12.183** To Work No. 5.36 In: “Impact of Series Resistance on Bulk CMOS Current Matching Over the 5-300K Temperature Range”, N.C. Dao, A. El Kass, C.T. Jin, P.H.W. Leong, IEEE Electron Device Letters, Vol. 38, No. 7, July 2017, pp. 847-850.
- 12.184** To Work No. 5.12 In: “A New Method for Series Resistance Extraction of Nanometer MOSFETs”, R. Trevisoli, R. Trevisoli, M. de Souza, S. Barraud, M. Vinet, M. Cassé, G. Reimbold, O. Faynot, G. Ghibaudo, M.A. Pavanello, IEEE Transactions on Electron Devices, Vol. 64, No. 7, July 2017, pp. 2797-2803.
- 12.185** To Work No. 5.33 In: “A New Method for Series Resistance Extraction of Nanometer MOSFETs”, R. Trevisoli, R. Trevisoli, M. de Souza, S. Barraud, M. Vinet, M. Cassé, G. Reimbold, O. Faynot, G. Ghibaudo, M.A. Pavanello, IEEE Transactions on Electron Devices, Vol. 64, No. 7, July 2017, pp. 2797-2803.
- 12.186** To Work No. 5.36 In: “A New Method for Series Resistance Extraction of Nanometer MOSFETs”, R. Trevisoli, R. Trevisoli, M. de Souza, S. Barraud, M. Vinet, M. Cassé, G. Reimbold, O. Faynot, G. Ghibaudo, M.A. Pavanello, IEEE Transactions on Electron Devices, Vol. 64, No. 7, July 2017, pp. 2797-2803.
- 12.187** To Work No. 5.36 In: “A 220-GHz Compact Equivalent Circuit Model of CMOS Transistors”, Y. Wu, Y. Hao, J. Liu, K. Kang, IEEE Microwave and Wireless Components Letters, Vol. 27, No. 7, July 2017, pp. 651-653.
- 12.188** To Work No. 5.31 In: “Effects of Gate-Length Scaling on Microwave MOSFET Performance”, G. Crupi, D. Schreurs, A. Caddemi, Electronics, 6, 62, August 2017, pp. 1-10.
- 12.189** To Work No. 5.10 In: “Noise Characterization and Modeling of Nanoscale MOSFETs”, X. Chen, Tesis Doctoral, McMaster University, Canadá, August 2017.
- 12.190** To Work No. 5.31 In: “Multi-Bias Equivalent Circuit for MOSFET Modelling”, G. Crupi, Z. Marinković, D. Schreurs, V. Marković, A. Caddemi, Proceedings of the 13th International Conference on Advanced Technologies, Systems and Services in Telecommunications, TELSIS 2017, October 2017, pp. 347-350.

- 12.191** To Work No. 5.35 In: “Voltage and oxide thickness dependent tunneling current density and tunnel resistivity model: Application to high-k material HfO₂ based MOS devices”, N.P. Maity, R. Maity, S. Baishya, Superlattices and Microstructures, Vol. 111, November 2017, pp. 628-641. <http://dx.doi.org/10.1016/j.spmi.2017.07.022>
- 12.192** To Work No. 5.07 In: “Tunable Wide-Band Second-Order All-Pass Filter-Based Time Delay Cell Using Active Inductor”, S.R. Aghazadeh, A. Saberkari, H. Martínez, E. Alarcón, Proceedings of the XXXII Conference on Design of Integrated Circuits and Systems, DCIS 2017, November 2017, pp. 1-5.
- 12.193** To Work No. 5.36 In: “Free Carrier Mobility Extraction in FETs”, F. Jazaeri, A. Pezzotta, C. Enz, IEEE Transactions on Electron Devices, Vol. 64, No. 12, December 2017, pp. 5279-5283.
- 12.194** To Work No. 5.36 In: “Performance Characteristics of p-Channel FinFETs with Varied Si-Fin Extension Lengths for Source and Drain Contacts”, Y.G. Liaw, W.S. Liao, M.C. Wang, C.W. Chen, D. Li, H. Gu, X. Zou, Semiconductors, Vol. 51, No. 12, December 2017, pp. 1650-1655.
- 2018** **12.195** To Work No. 5.17 In: “An Improved Ultrawideband Open-Short De-Embedding Method Applied up to 220 GHz”, Y. Wu, Y. Hao, J. Liu, C. Zhao, Y. Xu, W. Yin, K. Kang, IEEE Transactions on Components, Packaging and Manufacturing Technology, Vol. 8, No. 2, February 2018, pp. 269-276.
- 12.196** To Work No. 5.35 In: “Investigation of Surface Potential for Double Gate Hetero Junction Tunnel FinFET: Application to high-k material HfO₂”, B. Dixit, N.P. Maity, A. Dikshit, S. Tiwari, Ankush, J.S. Rana, V. Kumar, Proceedings of the 2018 Symposium on Devices, Circuits and Systems (ISDCS), March 2018, pp. 1-5. DOI: 10.1109/ISDCS.2018.8379663
- 12.197** To Work No. 5.17 In: “A Broadband Model over 1-325 GHz for GSG Pad Structure in InP HBT Technology”, Z. Xu, J. Liu, H. Lu, W. Cheng, F. Qian, H. Tao, Proceedings of the 2018 International Conference On Microwave and Millimeter Wave Technology (ICMMT), 7-11 May 2018, Chengdu, China, pp. 1-3. DOI: 10.1109/ICMMT.2018.8563627
- 12.198** To Work No. 6.50 In: “Extraction of Drain Current Thermal Noise in a 28 nm High-k/Metal Gate RF CMOS Technology”, H. Zhang, G. Niu, Q. Liang, K. Imura, IEEE Transactions on Electron Devices, Vol. 65, No. 6, June 2018, pp. 2393-2399. DOI: 10.1109/TED.2018.2820698

- 12.199** To Work No. 5.36 In: “Comprehensive Separate Extraction of Parasitic Resistances in MOSFETs Considering the Gate Bias-Dependence and the Asymmetric Overlap Length”, J. Kim, H. Yoo, H. Lee, S.K. Kim, S. Choi, S.J. Choi, D.H. Kim, D.M. Kim, *Microelectronics Reliability*, Vol. 85, No. 6, June 2018, pp. 66-70. DOI: 10.1016/j.microrel.2018.04.011
- 12.200** To Work No. 5.33 In: “Contribution à l’étude expérimentale des résistances d’accès dans les transistors de dimensions decanométrique des technologies CMOS FD-SOI”, Jean-Baptiste Henry, Doctoral Dissertation, Communauté Université Grenoble Alpes, Francia, June 2018.
- 12.201** To Work No. 5.35 In: “The Influence of Image Force Effect on the Accuracy of Modeling of Tunneling Current for Ultra Thin High-k Dielectric Material Ta₂O₅ Based MOS Devices”, N.P. Maity, R. Maity, S. Baishya, *Materials Today: Proceedings*, Vol. 5, No. 7, July 2018, pp. 15105-15109. DOI: 10.1016/j.matpr.2018.04.065
- 12.202** To Work No. 5.31 In: “Modeling and Application of Admittance Parameters of Nanometer MOSFET Under Millimeter Wave Band”, W. Jun, W. Dongzhen, *Advanced Engineering Science*, Vol. 50, No. 4, July 2018, pp. 186-192. DOI: 10.15961/j.jsuese.201700293
- 12.203** To Work No. 5.10 In: “Reducing Device Stress and Switching Losses Using Active Gate Drivers and Improved Switching Cell Design”, G. Engelmann, Doctoral Dissertation, Aachen University, July 2018.
- 12.204** To Work No. 5.36 In: “FinFET External Resistance Analysis by Extended Shift-and-Ratio Method”, C. Zhang, Z. Liu, X. Miao, T. Yamashita, *IEEE Transactions on Electron Devices*, Vol. 65, No. 8, August 2018, pp. 3127-3130. DOI: 10.1109/TED.2018.2849107
- 12.205** To Work No. 5.20 In: “Analysis, Design, and Optimization of the CHOPFET Magnetic Field Transducer”, L. Osberger, V. Frick, *IEEE Transactions on Electron Devices*, Vol. 65, No. 8, August 2018, pp. 3454-3459. DOI: 10.1109/TED.2018.2849867
- 12.206** To Work No. 5.24 In: “De-Embedding Unmatched Connectors for Electric Cable Fault Diagnosis”, Q. Zhang, N. Berrabah, M. Franchet, D. Vautrin, *Proceedings of the 10th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes (SAFEPROCESS !8)*, Warsaw, Poland, August 29-31, pp. 1-6. DOI:

- 12.207** To Work No. 5.12 In: "Prediction of RF Performances of Advanced MOS Transistors from DC and Low Frequency Measurements", D. Maafri, B. Kazemi-Esfteh, A. Saadi, M.C.E. Yagoub, J.P. Raskin, Microwave and Optical Technology Letters, Vol. 60, No. 9, September 2018, pp. 2256-2262. DOI: 10.1002/mop.31334
- 12.208** To Work No. 5.12 In: "Sensitivity Analysis and Uncertainty Estimation for Nanoscale MOSFET", P. Yu, L. Sun, J. Cheng, J. Gao, International Journal of Numerical Modeling, Vol. 31, No. 5, September/October 2018, pp. 1-11. DOI: 10.1002/jnm.2346
- 12.209** To Work No. 5.35 In: "Normalized Differential Conductance to Study Current Conduction Mechanisms in MOS Structures", T.H. Nouibat, Z. Messai, D. Chikouch, Z. Ouennoughi, N. Rouag, M. Rommel, L. Frey, Microelectronics Reliability, Vol. 91, No. 10, October 2018, pp. 183-187. DOI: 10.1016/j.microrel.2018.10.001
- 12.210** To Work No. 5.12 In: "Application of the Genetic Algorithm in MOSFET Modeling and Parameter Extraction", Y. Cao, W. Zhang, J. Fu, N. Liu, Q. Wang, L. Liu, Proceedings of the 3rd International Conference on Integrated Circuits and Microsystems, Shanghai, China, November 24-26, 2018, pp. 264-267. DOI: 10.1109/ICAM.2018.8596549
- 12.211** To Work No. 5.10 In: "Extracting Small-Signal Model Parameters of Graphene-Based Field-Effect Transistors", S.Q. Wang, R.X. Miao, S.A. Peng, Z. Jin, Physica Status Solidi, 1800477 November 2018, pp. 1-6. DOI: 10.1002/pssa.201800477.
- 12.212** To Work No. 5.35 In: "An Analytical Model for the Surface Potential and Threshold Voltage of a Double-Gate Heterojunction Tunnel FinFET", N.P. Maity, R. Maity, S. Baishya, Journal of Computational Electronics, November 2018, pp. 1-11. DOI: 10.1007/s10825-018-1279-5.
- 12.213** To Work No. 5.32 In: "Performance Analysis of S-Parameter in N-MOSFET Devices after Thermal Accelerated Tests", M.A. Belaïd, Microelectronics Reliability, Vol. 91, December 2018, pp. 8-14. DOI: 10.1016/j.microrel.2018.07.133
- 2019** **12.214** To Work No. 5.33 In: "Statistical MOSFET Modeling Methodology for Cryogenic Conditions", A. Kabaoglu, N.S. Solmaz, S. Ilik, Y. Uzun, M.B. Yelten, IEEE Transactions on Electron Devices, Vol. 66, No. 1, January 2019, pp. 66-72. DOI: 10.1109/TED.2018.2877942

- 12.215** To Work No. 5.07 In: “Tunable Active Inductor-Based Second-Order All-Pass Filter as a Time Delay Cell for Multi-GHz Operation”, S.R. Aghazadeh, H. Martinez, A. Saberhari, E. Alarcon, *Circuits, Systems and Signal Processing*, January 2019, pp. 1-17. DOI: 10.1007/s0034-019-01032-1
- 12.216** To Work No. 5.31 In: “A Complete Small-Signal MOSFET Model and Parameter Extraction Technique for Millimeter Wave Applications”, Y. Cao, W. Zhang, J. Fu, Q. Wang, L. Liu, A. Guo, *IEEE Journal of the Electron Devices Society*, Vol. 7, March 2019, pp. 398-403. DOI: 10.1109/JEDS.2019.2900202
- 12.217** To Work No. 5.12 In: “A New Method to Extract Gate Bias-Dependent Parasitic Resistances in GaAs pHEMTs”, R. Dang, L. Yang, Z. Lv, C. Song, Z. Wu, *Electronics*, Vol. 8, No. 3, March 2019, pp. 1-17. DOI: 10.3390/electronics8030266
- 12.218** To Work No. 5.13 In: “Effect of the Front-Metal Work Function on the Performance of a-Si:H(n⁺)/a-Si:H(i)/c-Si(p) Heterojunction Solar Cells”, C. Aliani, M. Krichen, A. Zouari, *Journal of Computational Electronics*, March 2019, pp. 576-583. DOI: 10.1007/s10825-019-01324-4
- 12.219** To Work No. 5.11 In: “Characterization Method for Integrated Magnetic Devices at Lower Frequencies (up to 110 MHz)”, D.A. Oumar, M.I. Boukhari, M.A. Taha, S. Capraro, D. Piétroy, J.P. Chatelon, J.J. Rousseau, *Journal of Electronic Testing*, March 2019, pp. 1-8. DOI: 10.1007/s10836-019-05790-3
- 12.220** To Work No. 5.17 In: “An improved open-short equivalent circuit model for CMOS transistors de-embedding”, Q. Wang, Y. Wu, K. Kang, *International Journal of Numerical Modeling*, March 2019, pp. 1-9. DOI: 10.1002/jnm.2589
- 12.221** To Work No. 5.17 In: “RF Characterization and small signal extraction on 22 nm CMOS fully-depleted SOI technology”, O. Kane, S. Lepilliet, L. Lucci, F. Danneville, P. Scheiblin, *Proceedings of the 2019 Joint International EUROSOI Workshop and International Conference on Ultimate Integration on Silicon (EUROSOI-ULIS)*, April 2019, pp. 1-4. DOI: 10.1109/EUROSOI-ULIS45800.2019.9041863
- 12.222** To Work No. 5.12 In: “Junctionless nanowire transistors parameters extraction based on drain current measurements”, R. Trevisoli, R.T. Doria, M. de Souza, S. Barraud, M.A. Pavanello, *Solid State Electronics*, Vol. 158, May 2019, pp. 37-45. DOI: 10.1016/j.sse.2019.2019.05.004

- 12.223** To Work No. 5.28 In: Chapter 8 (“High-Frequency and Noise Models in BSIM-IMG”) of book “Industry Standard FDSOI Compact Model BSIM-IMG for IC Design”, 1st Edition, edited by C. Hu, S. Khandelwal, Y.S. Chauhan, T. McKay, J. Watts, J.P. Duarte, P. Kushwaha, H. Agarwal, Woodhead Publishing, Elsevier, UK, June 2019. ISBN 978-0-08-102401.
- 12.224** To Work No. 5.17 In: “22nm Ultra-Thin Body and Buried Oxide FDSOI RF Noise Performance”, O.M. Kane, L. Lucci, D. Scheiblin, S. Lepilliet, F. Danneville, Proceedings of the 2019 IEEE Radio-Frequency Integrated Circuit Symposium, Boston, MA, USA, June 2019, pp. 35-38. DOI: 10.1109/RFIC.2019.8701740.
- 12.225** To Work No. 5.32 In: “A RAMS analysis for a precision scale-up configuration of the ‘Smart Street’ pilot site: an industry 4.0 case study”, E. Petritoli, F. Leccese, M. Botticelli, S. Pizzuti, F. Pieroni, , Acta IMEKO, Vol. 8, No. 8, June 2019, pp. 3-11. DOI: 10.21014/acta_imeko.v8i2.614
- 12.226** To Work No. 6.076 In: “Realization and Performance Analysis of Facile-Processed μ -IDE-Based Multilayer HfS₂/HfO₂ Transistors”, S. Sharma, S. Das, R. Khosla, H. Shrimali, S.K. Sharma, IEEE Transactions on Electron Devices, Vol. 66, No. 7, July 2019, pp. 3236-3241. DOI: 10.1109/TED.2019.2917323
- 12.227** To Work No. 5.20 In: “Non-Split Drain Magfet”, R. Nakachai, A. Poyai, T. Phetchakul, Proceedings of the 5th International Conference on Engineering, Applied Sciences and Technology (ICEAST 2019), July 2-5, 2019, Luang Prabang, Laos, pp. 1-4. DOI: 10.1109/ICESAT.2019.8802563
- 12.228** To Work No. 5.22 In: “Characterization of On-Die Interconnects Exhibiting Slow-Wave Propagation”, G. Romo, A. Sánchez, V. Sonawane, S. Powers, T. Michalka, B. Nae, Y. Shadrokh, J. Johansson, P. Robinson, Proceedings of 2019 IEEE International Symposium on Electromagnetic Compatibility, Signal and Power Integrity, New Orleans, LA, USA, July 2019, pp. 532-53. DOI: 10.1109/ISEMC.2019.8825232
- 12.229** To Work No. 5.36 In: “Oxide Based Field Effect Transistors for Large Area Radiation Detection Electronics”, R.A. Rodríguez Dávila, Doctoral Dissertation, University of Texas at Dallas, August 2019.
- 12.230** To Work No. 5.36 In: “on-Resistance in Vertical Power FinFETs”, M. Xiao, T. Palacios, Y. Zhang, IEEE Transactions on Electron Devices, Vol. 66, No. 9, September 2019, pp. 3903-3909. DOI: 10.1109/TED.2019.2928825

- 12.231** To Work No. 5.13 In: “Analysis of HfO₂ effect on the electrical performance of a-SiGe:H TFTs using 2D numerical simulations”, S. Salas, F. López, U. Zapata, J. Molina, J. Martínez, Proceedings of the 2019 IEEE International Conference on Engineering Veracruz (ICEV), October 2019, pp. 1-5. DOI: 10.1109/ICEV.2019.8920705
- 12.232** To Work No. 5.32 In: “Impact of BTI Stress on RF Small Signal Parameters of FDSOI MOSFETs”, T. Chohan, S. Slesazek, J. Trommer, G. Krause, G. Bossu, S. Lehman, T. Mikolajick, Proceedings of the 2019 IEEE International Integrated Reliability Workshop (IIRW), October 2019, pp. 1-4. DOI: 10.1109/IIRW47491.2019.8989903
- 12.233** To Work No. 5.12 In: “Small-Signal Modeling of mm-Wave MOSFET up to 110 GHz in 22nm FDSOI Technology”, Q.H. Le, D.K. Huynh, D. Wang, T. Kämpfe, M. Rudolph, Proceedings of the 2019 IEEE Asia-Pacific Microwave Conference (APMC), December 2019, pp. 222-224. DOI: 10.1109/APMC46564.2019.9038620
- 12.234** To Work No. 5.32 In: “Small-Signal Modeling of mm-Wave MOSFET up to 110 GHz in 22nm FDSOI Technology”, Q.H. Le, D.K. Huynh, D. Wang, T. Kämpfe, M. Rudolph, Proceedings of the 2019 IEEE Asia-Pacific Microwave Conference (APMC), December 2019, pp. 222-224. DOI: 10.1109/APMC46564.2019.9038620
- 12.235** To Work No. 5.17 In: “A New GSG Pad Compact Model for Skin and Proximity Effect”, E.S. Mawuli, Y. Wu, K. Kang, F. Sekyere, Proceedings of the 2019 IEEE Asia-Pacific Microwave Conference (APMC), December 2019, pp. 593-595. DOI: 10.1109/APMC46564.2019.9038205
- 12.236** To Work No. 5.17 In: “Comparison of On-chip De-embedding Methods with 28-nm FDSOI MOSFET up to 110 GHz”, S. Lee, H. Koo, K. Yang, S. Hong, Proceedings of the 2019 IEEE Asia-Pacific Microwave Conference (APMC), December 2019, pp. 1241-1243. DOI: 10.1109/APMC46564.2019.9038233
- 2020** **12.237** To Work No. 5.23 In: “Vertical-Aligned Silicon Nanowire Arrays with Strong Photoluminescence Fabricated by Metal-Assisted Electrochemical Etching”, D.T. Cao, C.T. Anh, L. Ngan, Journal of Nanoelectronics and Optoelectronics, Vol. 15, January 2020, pp. 127-135. DOI: 10.1166/jno.2019.2684

- 12.238** To Work No. 5.12 In: “On the DC extraction of the asymmetric parasitic source and drain resistances for MOSFETs”, R. Rodríguez, A. Ortiz, C. Ávila, Z. Shamsi, M. Quevedo, *Solid State Electronics*, Vol. 164, February 2020, pp. 1-7. DOI: 10.1016/j.sse.2019.107700
- 12.239** To Work No. 5.32 In: “Sensitive Devices and Phase Noise Degradation Mechanisms on all-NMOSFET RF VCO Aging”, S.M. Pazos, J.J. Baudino, M.N. Joglar, F.L. Aguirre, C. Navarro, F. Palumbo, F. Silveira, *Proceedings of the 2020 Argentine Conference on Electronics -- CAE*, February 2020, pp. 20-26. DOI: 10.1109/CAE48787.2020.9046373
- 12.240** To Work No. 5.23 In: “Efficient oil/saltwater separation using a highly permeable and fouling-resistant all-inorganic nanocomposite membrane”, R. Elshorafa, J. Saththasivam, Z. Liu, S. Ahzi, *Environmental Science and Pollution Research*, Vol. 27, February 2020, pp. 15488-15497. DOI: 10.1007/s11356-020-08021-x
- 12.241** To Work No. 5.32 In: “Reliability-Aware Design Space Exploration for Fully Integrated RF CMOS PA”, S. Pazos, F. Aguirre, F. Palumbo, F. Silveira, *IEEE Transactions on Device and Materials Reliability*, Vol. 20, No. 1, March 2020, pp. 33-41. DOI: 10.1109/TDMR.2019.2957489
- 12.242** To Work No. 5.12 In: “Characteristic function approach to analytical parameter extraction, verification, and circuit calibration for small-signal equivalent circuit of field effect transistors”, F.Y. Huang, Z.N. Wei, Y.M. Zhang, X.S. Tang, N. Jiang, *Solid State Electronics*, Vol. 165, March 2020, pp. 1-7. DOI: 10.1016/j.sse.2019.107753
- 12.243** To Work No. 5.33 In: “Extraction of series resistance and mobility degradation in MOSFETs using iterative method”, N. Maouhoub, K. Rais, *APTİKOM Journal on Computer Science and Information Technologies*, Vol. 5, No. 1, March 2020, pp. 160-166. DOI: 10.34306/APTIKOM.J.CSIT.158
- 12.244** To Work No. 5.36 In: “Extraction of series resistance and mobility degradation in MOSFETs using iterative method”, N. Maouhoub, K. Rais, *APTİKOM Journal on Computer Science and Information Technologies*, Vol. 5, No. 1, March 2020, pp. 160-166. DOI: 10.34306/APTIKOM.J.CSIT.158
- 12.245** To Work No. 5.12 In: “Analysis of Hot-Carrier Degradation in 22nm FDSOI Transistors Using RF Small-Signal Characteristics”, D.K. Huynh, Q.H. Le, P. Duhan, D. Wang, T. Kämpfe, M. Rudolph, *Proceedings of the 2020 German Microwave Conference (GeMiC)*, March 2020, pp. 1-4. DOI: 10.1002/jmmce.22218

- 12.246** To Work No. 5.21 In: “Analysis of Hot-Carrier Degradation in 22nm FDSOI Transistors Using RF Small-Signal Characteristics”, D.K. Huynh, Q.H. Le, P. Duhan, D. Wang, T. Kämpfe, M. Rudolph, Proceedings of the 2020 German Microwave Conference (GeMiC), March 2020, pp. 1-4. DOI: 10.1002/jmmce.22218
- 12.247** To Work No. 5.25 In: “Fabrication and Characterization of Ferrofluidic-Based Wire-Wound and Wire-Bonded Type Inductor for Continuous RF Tunable Inductor”, F.B.T. Hoveizavi, N.A. Rhaffor, S.S. Hamid, K.A.M. Zain, S.K.K. Mohd, M.T. Mustaffa, A.A. Manaf, Applied Sciences, May 2020, pp. 1-16. DOI: 10.3390/app10113776
- 12.248** To Work No. 5.24 In: “Optically Transparent 24 GHz Analog Front-End Based on Meshed Microstrip Lines for the Integration in a Self-Sufficient RFID Sensor Tag”, Q.H. Dao, L. Grundmann, B. Geck, IEEE Journal of Radio Frequency Identification, Vol. 4, No. 2, June 2020, pp. 83-92. DOI: 10.1109/JRFID.2019.2954471
- 12.249** To Work No. 5.36 In: “Energy Transformation Between the Inductor and the Power Transistor for the Unclamped Inductive Switching (UIS) Test”, K. Nidhi, J.H. Lee, S.C. Huang, M.D. Ker, IEEE Transactions on Device and Materials Reliability, Vol. 20, No. 2, June 2020, pp. 413-419. DOI: 10.1109/TDMR.2020.2985306
- 12.250** To Work No. 5.13 In: "Analytical Drain Current Model for a-SiGe:H Thin Film Transistors Considering Density of States" S. Salas-Rodríguez, F. López-Huerta, A.L. Herrera-May, J. Molina-Reyes, J. Martínez-Castillo, Electronics, 9, 1016, June 2020, pp. 1-12. DOI:10.3390/electronics9061016
- 12.251** To Work No. 5.35 In: “Performance Analysis and Scaling Behavior of Ultra-Scaled III-V (InAs) HEMTs System with 2-D Tunneling Effects on Leakage Current”, M. Zeyad, S.M.M. Ahmed, A.K. Pramanik, Md.M Rahman, Md.T.H. Maruf, D. Ghosh, Proceedings of the 2020 IEEE Region 10 Symposium (TENSYP), June 2020, pp. 48-51. DOI:10.1109/TENSYP50017.2020.9230705
- 12.252** To Work No. 5.27 In: “A de-embedding method with matrix rectification and influences of residual errors on model parameters extraction of InP HEMTs”, W. Ding, P. Ding, Y. Su, J. Zhou, F. Yang, J. Hu, S. Peng, J. Shi, D. Zhang, Z. Jin, International Journal of RF and Microwave Computer-Aided Engineering, Vol. 30, No. 7, July 2020, pp. 1-11. DOI: 10.1002/mmce.22218

- 12.253** To Work No. 5.17 In: “A broadband small-signal model extraction methodology over 0.2-220 GHz for bulk FinFETs in RF CMOS Technology”, W. Zhou, J. Liu, Z. Chen, L. Sun, International Journal of Numerical Modeling, Vol. 33, No. 4, July / August 2020, pp. 1-11. DOI: 10.1002/jnm.2712
- 12.254** To Work No. 5.39 In: “Wideband and Highly-Integrated Dual-Mode LTCC Filter Using Vertically Stacked Double-Ring Resonator”, L. Zhu, Progress in Electromagnetic Research Letters, Vol. 92, July 2020, pp. 139-145. DOI: 10.2528/PIERL20051502
- 12.254** To Work No. 5.17 In: “Validation and parameter extraction of a compact equivalent circuit model for an RF CMOS transistor”, J.A. Uqaili, R.S. Uqaili, S. Memon, K.K. Soothar, K.A. Memon, M.F. Haider, Journal of Computational Electronics, July 2020, pp. 1-7. DOI: 10.1007/s10825-020-01570-x
- 12.256** To Work No. 5.20 In: “High Sensitivity Non-split Drain MAGFET for Wireless Sensor Networks”, R. Nakachai, A. Poyai, T. Phetchakul, Journal of Mobile Multimedia, Vol. 16, No. 1-2, August 2020, pp. 45-64. DOI: 10.13052/jmm1550-4646.16123
- 12.257** To Work No. 5.30 In: “Systematic and Rigorous Extraction Procedure for InP HBT π -type Small-signal Model Parameters”, J. Zhang, L. Zhang, M. Liu, L. Zhang, Journal of Semiconductor Technology and Science, Vol. 20, No. 4, August 2020, pp. 372-380. DOI: 10.5573/JSTS.2020.20.4.372
- 12.258** To Work No. 5.28 In: “Scalability of Multifinger HEMT Performance”, G. Crupi, A. Raffo, V. Vadala, G. Vannini, D.M.M.-P. Schreurs, A. Caddemi, IEEE Microwave and Wireless Component Letters, Vol. 30, No. 9, September 2020, pp. 869-872. DOI: 10.1109/LMWC.2020.3012181
- 12.259** To Work No. 5.36 In: “Characteristics Research of a High Sensitivity Piezoelectric MOSFET Acceleration Sensor”, C. Ai, X. Zhao, D. Wen, Sensors, Vol. 20, September 2020, pp. 1-14. DOI: 10.3390/s20174988
- 12.260** To Work No. 5.33 In: “A surface potential-based DC model considering interface trap states for 4H-SiC power MOSFETs”, Y. Liu, Z. Peng, Y. Lu, B. Wang, W. Dang, AIP Advances, 10, 095224, September 2020, pp. 10.095224-1-10.095224-7. DOI: 10.1063/5.0023293

- 12.261** To Work No. 5.24 In: “Analysis of the parameter extraction for on-chip transmission lines”, S. Yang, J. Fu, L. Zhang, L. Liu, Q. Wang, Y. Feng, IEICE Electronics Express, Vol. 17, No. 18, September 2020, pp. 1-5. DOI: 10.1587/elex.17.20200295
- 12.262** To Work No. 5.36 In: “Alternating Current-based Technique for Separate Extraction of Parasitic Resistances in MISFETs With or Without the Body Contact”, H.S. Kim, H.B. Yoo, J. Yu, J.H. Ryu, S.J. Choi, D.H. Kim, D.M. Kim, IEEE Electron Device Letters, Vol. 41, No. XX, XXXXXXXXXX 2020, pp. XXXX-XXXX. DOI: 10.1109/LED.2020.3020405
- 12.263** To Work No. 5.33 In: “A physics-based compact model for MoS₂ field-effect transistors considering the band-tail effect and contact resistance”, Y. Liu, J. Zeng, Z. Zhu, X. Dong, W.L. Deng, Japanese Journal of Applied Physics, Vol. 59, No. 10, October 2020, pp. 104004-1–104004-6. DOI: 10.35848/1347-4065/abb7e1
- 12.264** To Work No. 5.12 In: “Analysis of Gate-Metal Resistance in CMOS-Compatible RF GaN HEMTs”, R.Y. ElKashlan, R. Rodríguez, S. Yadav, A. Khaled, U. Peralagu, A. Alian, N. Waldron, M. Zhao, P. Wambacq, B. Parvais, N. Collaert, IEEE Transactions on Electron Devices, Vol. 67, No. 11, November 2020, pp. 4592-4596. DOI: 10.1109/TED.2020.3017467
- 12.265** To Work No. 5.32 In: “Hot-carrier-injection resilient RF power amplifier using adaptive bias”, S.M. Pazos, F.L. Aguirre, F. Palumbo, F. Silveira, Microelectronics Reliability, Vol. 114, No. 113912, November 2020, pp. 1-5. DOI: 10.1016/j.microrel.2020.113912
- 12.266** To Work No. 5.17 In: “A simple and Accurate Modeling Method of Channel Thermal Noise Using BSIM4 Noise Models”, I. Myeong, J. Kim, H. Ho, I. Song, Y. Kim, H. Shin, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, Vol. 39, No. 12, December 2020, pp. 4351-4358. DOI: 10.1109/TCAD.2020.2974339
- 12.267** To Work No. 5.13 In: “Equivalent Models for Photovoltaic Cell — A Review”, N.M.F.T.S. Araujo, F.J.P. Sousa, F.B. Costa, Thermal Engineering, Vol. 19, No. 2, December 2020, pp. 77-98. DOI: 10.5380/reterm.v19i2.78625

- 12.268** To Work No. 6.055 In: “Optimized Crosstalk Circuit for Long Wire Copper Interconnects using 45nm CMOS Inverter”, H. Bhardwaj, S. Jadav, H. Sohal, S. Jain, Proceedings of the 2020 IEEE Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECOM-ECE), December 2020, pp. 392-395. DOI: 10.1109/WIECOM-ECE52138.2020.9397927
- 2021** **12.269** To Work No. 5.35 In: “Diode-Like Current Leakage and Ferroelectric Switching in Silicon SIS Structures with Hafnia-Alumina Nanolaminates”, V.P. Popov, F.V. Tikhonenko, V.A. Antonov, I.E. Tyschenko. A.V. Miakonkikh, S.G. Simakin, K.V. Rudenko, Nanomaterials 2021, 11, 291, January 2021, pp. 1-14. DOI: 10.3390/nano11020291
- 12.270** To Work No. 5.40 In: “Design and Implementation of UWB Slot-Loaded Printed Antenna for Microwave and Millimeter Wave Applications”, S.Y.A. Fatah, E.K.I. Hamad, W. Swelam, A.M.M.A. Allam, M.F.A. Sree, H.A. Mohamed, IEEE Access, Vol. 9, February 2021, pp. 29555-29564. DOI: 10.1109/ACCESS.2021.3057941
- 12.271** To Work No. 5.36 In: “Interfacial Properties of nMOSFETs With Different Al₂O₃ Capping Layer Thickness and TiN Gate Stacks”, D. Wang, T. Xu, E. Simoen, B. Govoreanu, C. Clays, Y. Zhang, IEEE Transactions on Electron Devices, Vol. 68, No. 3, March 2021, pp. 948-953. DOI: 10.1109/TED.2020.3047356
- 12.272** To Work No. 5.40 In: “Analysis of Frequency Characteristics of Meander Structures with Different Connecting Electrodes”, D. Belova-Plonienė, A. Katkevičius, Proceedings of the 2020 IEEE 8th Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE), April 2021, pp. 948-953. DOI: 10.1109/AIEEE51419.2021.9435773
- 12.273** To Work No. 5.36 In: “TCAD Validation of an Intercept-at-Zero-Gate-Length MOSFET Series Resistance Extraction Method”, K. Takeuchi, T. Mizutani, T. Saraya, M. Kobayashi, T. Hiramoto, Proceedings of the 2021 International Symposium on VLSI Technology, Systems and Applications (VLSI-TSA), April 2021, Hsinchu, Taiwan, pp 1-2. DOI:10.1109/VLSI-TSA51926.2021.9440119
- 12.274** To Work No. 5.17 In: “Novel Physics-Based Small-Signal Modeling and Characterization for Advanced RF Bulk FinFETs”, W. Zhang, S. Yin, W. Hu, Y. Wang, IEEE Transactions on Electron Devices, Vol. 68, No. 5, May 2021, pp. 2160-2166. DOI: 10.1109/TED.2021.3063211

- 12.275** To Work No. 5.35 In: “Thermally Robust High-Resistance Layers on Low-Resistance Silicon Synthesized by Molecular CO⁺ Ion Implantation”, V.P. Popov, S.M. Tarkov, F.V. Tikhonenko, V.A. Antonov, I.E. Tyschenko, S.G. Simakin, K.V. Rudenko, *Physica Status Solidi A*, May 2021, pp. 2100109-1—2100109-7. DOI:10.1002/pssa.202100109
- 12.276** To Work No. 6.084 In: “Dual-mode LTCC Filter with 4th-order Harmonic Suppression for 5G N78 Applications”, H. Tie, L. Luo, Z. Song, Q. Ma, S. Hu, B. Zhou, *Proceedings of the 2021 International Conference on Microwave and Millimeter Wave Technology (ICMMT)*, May 2021, pp. 1-2. DOI:10.1109/ICMMT52847.2021.9618059
- 12.277** To Work No. 6.086 In: “Dual-mode LTCC Filter with 4th-order Harmonic Suppression for 5G N78 Applications”, H. Tie, L. Luo, Z. Song, Q. Ma, S. Hu, B. Zhou, *Proceedings of the 2021 International Conference on Microwave and Millimeter Wave Technology (ICMMT)*, May 2021, pp. 1-2. DOI:10.1109/ICMMT52847.2021.9618059
- 12.278** To Work No. 5.39 In: “Dual-mode LTCC Filter with 4th-order Harmonic Suppression for 5G N78 Applications”, H. Tie, L. Luo, Z. Song, Q. Ma, S. Hu, B. Zhou, *Proceedings of the 2021 International Conference on Microwave and Millimeter Wave Technology (ICMMT)*, May 2021, pp. 1-2. DOI:10.1109/ICMMT52847.2021.9618059
- 12.279** To Work No. 5.22 In: “Model of CPW Transmission Lines with different widths of ground”, J. Zhang, Y. Wu, C. Sun, H. Wang, Y. Xu, K. Kang, *Proceedings of the 2021 International Conference on Microwave and Millimeter Wave Technology (ICMMT)*, May 2021, pp. 1-3. DOI:10.1109/ICMMT52847.2021.9618348
- 12.280** To Work No. 5.39 In: “Dual-Mode LTCC Filter with 2nd-order Harmonic Suppression for 5G Applications”, H. Tie, Z. Song, Q. Ma, L. Qian, S. Hu, B. Zhou, *Proceedings of the 2021 International Conference on Microwave and Millimeter Wave Technology (ICMMT)*, May 2021, pp. 1-3. DOI:10.1109/ICMMT52847.2021.9618574
- 12.281** To Work No. 5.40 In: “Design and Performance of Four Port MIMO Antenna for IOT Applications”, R. Nagendra, S. Swarnalatha, *ICT Express*, May 2021, pp. 1-4. DOI: 10.1016/j.icte.2021.05.008

- 12.282** To Work No. 5.36 In: “An Analytical Method for Parameter Extraction in Oxide Semiconductor Field-Effect Transistors”, Y.C. Chien, H. Londoño-Ramírez, C.W. Kuo, Y.C. Tsao, M. Nag, T.C. Chang, K.W. Ang, IEEE Transactions on Electron Devices, Vol. 68, No. 6, June 2021, pp. 2717-2722. DOI:10.1109/TED.2021.3072878
- 12.283** To Work No. 5.36 In: “Mobility Degradation and Series Resistance in Graphene Field-Effect Transistors”, K. Jeppson, M. Asad, J. Stake, IEEE Transactions on Electron Devices, Vol. 68, No. 6, June 2021, pp. 3091-3095. DOI: 10.1109/TED.2021.3074479
- 12.284** To Work No. 5.36 In: “Current-to-transconductance ratio technique for simultaneous extraction of threshold voltage and parasitic resistances in MOSFETs”, H. Kim, H.B. Yoo, J.H. Ryu, J.H. Bae, S.J. Choi, D.H. Kim, D.M. Kim, Solid State Electronics, Vol. 183, June 2021, pp. 1-6. DOI: 10.1016/j.sse.2021.108133
- 12.285** To Work No. 6.084 In: “Compact LTCC Filter with 7th-Order Harmonics Suppression for 5G N77 Band Applications”, L. Luo, H. Tie, Q. Ma, B. Zhou, Progress In Electromagnetics Research Letters, Vol. 98, June 2021, pp. 69-74. DOI: 10.2528/PIERL21051601
- 12.286** To Work No. 6.086 In: “Compact LTCC Filter with 7th-Order Harmonics Suppression for 5G N77 Band Applications”, L. Luo, H. Tie, Q. Ma, B. Zhou, Progress In Electromagnetics Research Letters, Vol. 98, June 2021, pp. 69-74. DOI: 10.2528/PIERL21051601
- 12.287** To Work No. 5.39 In: “Compact LTCC Filter with 7th-Order Harmonics Suppression for 5G N77 Band Applications”, L. Luo, H. Tie, Q. Ma, B. Zhou, Progress In Electromagnetics Research Letters, Vol. 98, June 2021, pp. 69-74. DOI: 10.2528/PIERL21051601
- 12.288** To Work No. 5.30 In: “An analytical method for parameter extraction of InP HBTs small-signal model”, J. Zhang, M. Liu, J. Wang, K. Xu, Circuit World, June 2021, pp. 1-8. DOI: 10.1108/CW-06-2020-0099
- 12.289** To Work No. 5.17 In: “Characterization of Shot Noise Suppression in Nanometer MOSFETs”, S. Das, J.C. Bardin, Proceedings of the IEEE/MTT-S International Microwave Symposium, June 2021, pp. 892-895. DOI: 110.1109/IMS19712.2021.9574931

- 12.290** To Work No. 5.40 In: “Shared Aperture Slot-Based Sub-6 GHz and mm-Wave IoT Antenna for 5G Applications”, R. Hussain, IEEE Internet of Things Journal, Vol 8, No. 13, July 1, 2021, pp. 10807-10814. DOI: 10.1109/JIOT.2021.3050383
- 12.291** To Work No. 6.018 In: “A Cryogenic Broadband Sub-1-dB NF CMOS Low Noise Amplifier for Quantum Applications”, Y. Peng, A. Ruffino, E. Charbon, IEEE Journal of Solid State Circuits, Vol 56, No. 7, July 2021, pp. 2040-2053. DOI: 10.1109/JSSC.2021.3073068
- 12.292** To Work No. 5.36 In: “Charge Carrier Mobility and Series Resistance Extraction in 2D Field-Effect Transistors: Toward the Universal Technique”, YY.C. Chien, X. Feng, L. Chen, K.C. Chang, W.C. Tan, S. Li, L. Huang, K.W. Ang, Advanced Functional Materials, 2105003, July 2021, pp. 1-10. DOI: 10.1002/adfm.202105003
- 12.293** To Work No. 5.23 In: “Hot-carrier radiative recombination through phonon confinement in silicon nanocrystals embedded in colloidal xerogel matrix”, S. Biswas, A. Nandi, U. Ghanta, B. Jana, S. Mukhopadhyay, H. Saha, S.M. Hossain, Journal of Applied Physics, 130, 033102, July 2021, pp. 1-21. DOI: 10.1063/5.0047226
- 12.294** To Work No. 5.24 In: “A Self-Sufficient RFID Sensor Tag based on Optically Transparent Antenna and Analog Front-End for the Integration in Metal Components”, Q.H. Dao, Doctoral Dissertation, Leibniz University Hannover, July 2021.
- 12.295** To Work No. 5.22 In: “Optimization and Design of Passive Link with Single Channel 25 Gbps Based on High-Speed Backplane”, J. Liu, K. Zhang, Q. Wu, L. Peng, K. Yao, H. Liu, Electronics, 10, 1773, July 2021, pp. 1-17. DOI: 10.3390/electronics10151773
- 12.296** To Work No. 5.35 In: “A surface potential model for tri-gate metal oxide semiconductor field effect transistors: Analysis below 10 nm channel length”, S. Panchanan, R. Maity, S. Baishya, N.P. Maity, Engineering Science and Technology, an International Journal, Vol. 24, No. 4, August 2021, pp. 879-889. DOI: 10.1016/j.jestch.2020.12.020
- 12.297** To Work No. 5.40 In: “Planar and printed antennas for Internet of Things-enabled environment: Opportunities and challenges”, R. Roges, P.K. Malik, International Journal of Communication Systems, August 2021, pp. 1-32. DOI: 10.1002/dac.4940

- 12.298** To Work No. 5.06 In: “Model for Analyzing the Critical Variables of an Industrial Process Using Fuzzy Inference System and Likert Scale”, C.N. Santino, C.H. de Oliveira Fontes, J.L. Moya Rodríguez, S. Ávila Filho, Arabian Journal of Science and Engineering, November 2021, pp. 1-14. DOI: 10.1007/s13369-021-06364-2
- 12.299** To Work No. 5.40 In: “Research on Design Method of 220G Waveguide Antenna Based on MEMS Technology”, J. Mei, S. Wu, H. Wang, Z. Zeng, X. Chen, Y. Fu, Proceedings of the 2nd China International SAR Symposium (CISS), November 2021, Shanghai, China, pp. 1-4. DOI: 10.23919/CISS51089.2021.9652391
- 12.300** To Work No. 5.33 In: “A new Method to Extract Mobility Degradation and Parasitic Series Resistance of Nano-scales MOSFETs”, Z. Yang, Q. Xie, M. Zhao, Z. Wang, Proceedings of the 2021 IEEE International Conference on Integrated Circuits, Technologies and Applications, November 2021, Zhuhai, China, pp. 99-100. DOI:10.1109/ICTA53157.2021.9661623
- 12.301** To Work No. 6.014 In: “Circuit convergence study using machine learning compact models”, Z-K. Yang, M-H. Hsu, C-Y. Chang, Y-W. Ho, P-N. Liu, A. Lin, December 2021, pp. 1-10. DOI: 10.13140/RG.2.2.26151.27048
- 12.302** To Work No. 5.40 In: “New design of Miniature rectangular patch antenna with DGS for 5G mobile communications”, F.Z. Moussa, S. Ferouani, Y. Belhadef, Proceedings of the 2021 International Conference on Information Systems and Advanced Technologies (ICISAT), December 2021, pp. 1-5. DOI: 10.1109/ICISAT54145.2021.9678464
- 12.303** To Work No. 5.12 In: “Expansibility Evaluation of a Two-dimensional Access Array for Quantum Computing”, J. Michniewicz, Doctoral Dissertation, University of Cambridge, December 2021. DOI: 10.17863/CAM.83492
- 12.304** To Work No. 5.36 In: “Temperature-Dependent Electrical Properties of nMOSFETs With Different Thickness Al₂O₃ Capping Layer and TiN Gate”, JD. Wang, J. Zheng, Y. Zhang, T. Xu, E. Simoen, B. Govoreanu, C. Claeys, IEEE Transactions on Electron Devices, Vol. 68, No. 12, December 2021, pp. 6020-6025. DOI: 10.1109/TED.2021.3118660

- 2022** **12.305** To Work No. 5.12 In: “A robust single device MOSFET series resistance extraction method considering horizontal-field-dependent mobility”, K. Takeuchi, T. Mizutani, T. Saraya, M. Kobayashi, T. Hiramoto, Japanese Journal of Applied Physics, Vol 61, SC1016, February 2022, pp. SC1016-1—SC1016-6. DOI:10.35848/1347-4065/ac3eb7
- 12.306** To Work No. 5.33 In: “A robust single device MOSFET series resistance extraction method considering horizontal-field-dependent mobility”, K. Takeuchi, T. Mizutani, T. Saraya, M. Kobayashi, T. Hiramoto, Japanese Journal of Applied Physics, Vol 61, SC1016, February 2022, pp. SC1016-1—SC1016-6. DOI:10.35848/1347-4065/ac3eb7
- 12.307** To Work No. 5.36 In: “A robust single device MOSFET series resistance extraction method considering horizontal-field-dependent mobility”, K. Takeuchi, T. Mizutani, T. Saraya, M. Kobayashi, T. Hiramoto, Japanese Journal of Applied Physics, Vol 61, SC1016, February 2022, pp. SC1016-1—SC1016-6. DOI:10.35848/1347-4065/ac3eb7
- 12.308** To Work No. 5.17 In: “Silicon Germanium BiCMOS Integrated Circuits for Scalable Cryogenic Sensing Applications”, H. Mohsen, Doctoral Dissertation, University of Massachusetts Amherst, February 2022. DOI:10.7275/2724516
- 12.309** To Work No. 5.07 In: “Current-Reuse Active Inductor-Based VCO for Reconfigurable RF Front-End”, L.N. Suresh, B. Manickam, IETE Journal of Research, February 2022, pp. 1-10. DOI: 10.1080/03772063.2022.2038284
- 12.310** To Work No. 5.07 In: “Timed Array Antenna System: Applications to Ultra-Wideband and Beamforming Receivers”, S.R. Aghazadeh, Doctoral Dissertation, Universitat Politècnica de Catalunya, February 2022. <http://hdl.handle.net/10803/674303>
- 12.311** To Work No. 5.20 In: “Novel MAGFinFET: Operation, Design and Geometry Effect for Modern Sensors”, K.T.N. Swe, C. Pamonchom, A. Poyai, T. Phetchakul, Journal of Mobile Multimedia, Vol. 18, No. 4, March 2022, pp. 1301-1332. DOI: 10.13052/jmm1550-4646.18416
- 12.312** To Work No. 5.23 In: “Atomic scale memristive photon source”, B. Cheng, T. Zellweger, K. Malchow, X. Zhang, M. Lewerenz, E. Passerini, J. Aeschlimann, U. Koch, M. Luisier, A. Emboras, A. Bouhelier, J. Leuthold, Light Science and Applications, Vol. 11:78, March 2022, pp. 3-9. DOI: 110.1038/s41377-022-00766-z

- 12.313** To Work No. 5.36 In: “Crosstalk Induced Shoot-Through in BTI-Stressed Symmetrical & Asymmetrical Double-Trench SiC Power MOSFETs”, J. Yang, S. Jahdi, B. Stark, O. Alatise, J. Ortiz-González, R. Wu, P. Mellor, IEEE Open Journal of the Industrial Electronics Society, Vol. 3, March 2022, pp. 188-202. DOI: 10.1109/OJIES.2022.3160095
- 12.314** To Work No. 5.36 In: “Low-Field Mobility and High-Field Velocity of Charge Carriers in InGaAs/InP High-Electron-Mobility Transistors”, I. Harrysson-Rodrigues, A. Vorobiev, IEEE Transactions on Electron Devices, Vol. 69, No. 4, April 2022, pp 1786-1791. DOI:10.1109/TED.2022.3147733
- 12.315** To Work No. 5.42 In: “Single-step algorithm for the cascade assembly of multiple S-Parameters based multiports networks”, F. De Paulis, S. Scafati, C. Olivieri, A. Orlandi, International Journal of RF and Microwave Computer-Aided Engineering, Vol 32, No. 4, April 2022, pp. 1-13. DOI:10.1002/mmce.23070
- 12.316** To Work No. 5.40 In: Capítulo 10 “Importance and Uses of Microstrip Antenna in IoT”, A. Birwal, de libro “Planar Antennas: Design and Applications”, Editor: P. K. Malik, April 2022, ISBN 978-1-003-18732-5. DOI: 10.1201/9781003187325
- 12.317** To Work No. 5.40 In: Capítulo 16 “A survey on Antennas for IIoT Application”, P.K. Singh, S.K. Singh, S. Mallik, D.K. Choudhary, A.K. Tiwary, de libro “Industrial Internet of Things: Technologies and Research Directions”, Editores: A. Sharma, S.K. Jangir, M. Kumar, D.K. Choubey, T. Shrivastava, S. Balamurugan, April 2022, ISBN 978-0-367-70207-6. DOI: 10.1201/9781003145004
- 12.318** To Work No. 5.10 In: “Efficient 6.5 dBm 55 GHz CMOS VCO with simultaneous phase noise and tuning range optimization”, Z. Tibenszky, H. Morath, C. Carta, F. Ellinger, Frequenz, April 2022, pp. 1-11. DOI: 10.1515/freq-2021-0248
- 12.319** To Work No. 5.43 In: “Graphene-Integrated Plasmonic Metamaterial for Manipulation of Multi-Band Absorption, Based on Near-Field Coupled Resonators”, M.H. Nam, B.S. Tung, B.X. Khuyen, D.T. Ha, N.V. Ngoc, M.C. Tran, D.T. Le, V.D. Lam, L.Chen, H. Zheng, Y.P. Lee, Crystals, 12, 525, April 2022, pp. 1-10. DOI: 10.3390/cryst12040525

- 12.320** To Work No. 5.12 In: “Single Device MOSFET Series Resistance Extraction Methods: Comparison Between Newer and Older”, K. Takeuchi, T. Mizutani, T. Saraya, M. Kobayashi, T. Hiramoto, Proceedings of the 34th IEEE International Conference on Microelectronic Test Structures, Cleveland, Ohio, USA, April 2022, pp. 1-4. DOI:10.1109/ICMTS50340.2022.9898270
- 12.321** To Work No. 5.33 In: “Single Device MOSFET Series Resistance Extraction Methods: Comparison Between Newer and Older”, K. Takeuchi, T. Mizutani, T. Saraya, M. Kobayashi, T. Hiramoto, Proceedings of the 34th IEEE International Conference on Microelectronic Test Structures, Cleveland, Ohio, USA, April 2022, pp. 1-4. DOI:10.1109/ICMTS50340.2022.9898270
- 12.322** To Work No. 5.36 In: “Single Device MOSFET Series Resistance Extraction Methods: Comparison Between Newer and Older”, K. Takeuchi, T. Mizutani, T. Saraya, M. Kobayashi, T. Hiramoto, Proceedings of the 34th IEEE International Conference on Microelectronic Test Structures, Cleveland, Ohio, USA, April 2022, pp. 1-4. DOI:10.1109/ICMTS50340.2022.9898270
- 12.323** To Work No. 5.40 In: Capítulo 10 “A New Dual Band Antenna with Improvement Performances for the Internet of Things Applications”, de libro “Digital Technologies and Applications”, Y. Mouzouna, H. Nasraoui, J. El Aoufi, A. Mouhsen, Editores S. Motahhir, B. Bossoufi, Springer, May 2022, pp. 285-294. DOI: 10.1007/978-3-031-02447-4_30
- 12.324** To Work No. 5.17 In: “US Patent # 11,340,286 B2, On-Wafer S-Parameter Calibration Method”, A. Wu, C. Li, C. Liu, Y. Wang, X. Fu, F. Liang, X. Tian, Y. Liu, J. Cao, May 2022, pp. 1-13.
- 12.325** To Work No. 5.17 In: “The investigation of the signal radiation mechanism of different GSG-pads connection methods”, Z. Song, H. Liu, E.S. Mawuli, Y. Yu, C. Zhao, Y. Wu, H. Tang, K. Kang, International Journal of Numerical Modeling, Vol. 35, No. 5, May 2022, pp. 1-13. DOI: 10.1002/jnm.3026
- 12.326** To Work No. 5.43 In: “120-GHz On-Chip Folded Dipole Antenna With Integrated Artificial Magnetic Conductor Structures”, J.I. Jung, J.R. Yang, Proceedings of the 14th Global Symposium on Millimeter-Waves & Terahertz (GSMM 2022), Seoul, Korea, May 2022, pp. 63-75. DOI: 10.1109/GSMM53818.2022.9792360

- 12.327** To Work No. 5.40 In: “Effect of Patch Location on the Performance of a Rectangular Microstrip Antenna”, B. Bukhari, G.M. Rather, Proceedings of the 3rd International Conference for Emerging Technology (INCET 2022), Belgaum, India, May 2022, pp. 1-4. DOI: 10.1109/INCET54531.2022.9824700
- 12.328** To Work No. 5.22 In: “Dual-band gain-boosted planar lens antenna using a single layer metasurface for 6G applications”, M. Ramzan, P. Sen, Proceedings of the 2022 Joint European Conference on Networks and Communications & 6G Summit (EuCNC/6G Summit): Components and Microelectronics (CME), Grenoble, France, June 2022, pp. 446-450. DOI: 10.1109/EuCNC/6GSummit54941.2022.9815736
- 12.329** To Work No. 5.28 In: “Hexahedron-Based Control Volume Finite Element Method for Fully Coupled Nonlinear Drift-Diffusion Transport Equations in Semiconductor Devices”, T.Y. Li, Q. Zhan, W. Chen, D. Wang, Y.D. Wang, G. Li, W.J. Wang, H. Xie, K. Kang, W.Y. Yin, IEEE Transactions on Microwave Theory and Techniques, Vol. 70. No. 6, June 2022, pp. 2965-2978. DOI: 10.1109/TMTT.2022.3162314
- 12.330** To Work No. 5.44 In: “High Gain Coplanar Waveguide Fed Slotted Two Element Yagi-Uda Antenna Array with Common Reflector for Ka-band applications”, A. Chakraborty, S. Srivastava, International Journal on Communications Antenna and Propagation, Vol. 12 No. 3, June 2022, pp. 189-197. DOI: 10.15866/irecap.v12i3.21906
- 12.331** To Work No. 6.050 In: “Temperature-Dependent Threshold Voltage Extraction of FinFETs Using Noise Measurements”, Y. Wu, X. Chi, F. Wang, X. Liu, C. Zhao, H. Liu, Y. Yu, K. Kang, IEEE Transactions on Microwave Theory and Techniques, Vol. 70 No. 7, July 2022, pp. 3442-3451. DOI: 10.1109/TMTT.2022.3159244
- 12.332** To Work No. 5.44 In: “Antenna Designs for 5G/IoT and Space Applications”, F. Tubbal, L. Matekovits, R. Raad, Electronics, Vol. 11, No. 16, 2484, August 2022, pp. 1-4. DOI: 10.3390/electronics11162484
- 12.333** To Work No. 5.17 In: “Broadband Characterization of Thin Dielectrics Using Heterolayer and Monolayer MIM Capacitors”, Y. Shin, S.G. Nam, J. Hey, S. Nam, IEEE Transactions on Instrumentation and Measurement, Vol. 71, August 2022, pp. 1-14. DOI: 10.1109/TIM.2022.3200364

- 12.334** To Work No. 5.36 In: “Parameter extraction techniques for the analysis and modeling of resistive memories”, D. Maldonado, S. Aldana, M.B. González, F. Jiménez-Molinos, F. Campabadal, J.B. Roldán, *Microelectronics Engineering*, Vol. 265 (111876), September 2022, pp. 1-8. DOI: 10.1016/j.mee.2022.111876
- 12.335** To Work No. 5.10 In: “Extraction of bias dependent access resistances of advanced MOSFETs”, B. Zatout, D. Maafri, S. Kerai, *Proceedings of the 2nd International Conference on Advanced Electrical Engineering (ICAEE 2022)*, Constantine, Algeria, October 2022, pp. 1-4. DOI: 10.1109/ICAEE53772.2022.9962089
- 12.336** To Work No. 5.31 In: “A Complete Analytical RF Model for Nanoscale Semiconductor-On-Insulator MOSFET”, C. Rajarajachozhan, S. Karthick, S. Deb, N.B. Singh, *Silicon* (2022), November 2022, pp. 1-14. DOI: 10.1007/s12633-022-02215-3
- 12.337** To Work No. 5.17 In: “An Open Short De-Embedding Accuracy Correction Methodology for On-chip High-speed ESD and RF Component Characterization”, G. Lu, W. Gao, L. Wang, X. Gao, M. Li, *Proceedings of the 2022 International EOS/ESD Symposium on Design and System (IEDS)*, 09-11 November 2022, Chengdu, China, pp. 1-4. ISBN:978-1-58537-338-3
- 12.338** To Work No. 6.069 In: “Design and Implementation of High Efficiency Power Amplifiers for 5G Applications”, J. Bachi, Tesis Doctoral, Institut Politechnique de Paris, Francia, noviembre 2022.
- 12.339** To Work No. 5.43 In: “EMI Shielding for 5G IOT devices with MXene Metamaterial Absorber”, Z. Ulla, M. Al Hasan, I.B. Mabrouk, *Proceedings of the 9th International Conference on Internet of Things: Systems, Management and Security (IOTSMS)* 29 November 2022 - 01 December 2022, Milan, Italy, pp. 1-4. DOI: 10.1109/IOTSMS58070.2022.10062134
- 12.340** To Work No. 5.21 In: “Scattering Parameter Analysis of Gate Stack Gate All Around (GS-GAA) FinFET at THz for RF Applications”, B. Kumar, M. Sharma, R. Chaujar, *Proceedings of the 8th International Conference on Signal Processing and Communications (ICSC)*, Noida, India, December 1-3, 2022, pp. 653-658. DOI: 10.1109/ICSC56524.2022.10009615
- 12.341** To Work No. 5.40 In: “Electro-Geometrical Analysis of Transversal V-Fold Patch Antenna”, K.A.K. Ayyala, A. Thakur, Z. Yong, S.S. Yazdani, P. Thakur, M.S. Prasad, N.M. Murad, S. Baccar, B. Agnus, B. Ravelo, *International Journal of Electrical and Electronics Research (IJEER)*, Vol. 10, No. 4, December 2022, pp. 1281-1289. DOI: 10.37391/IJEER.100481

- 12.342** To Work No. 5.21 In: “Small Signal Analysis of Stacked Gate GAA FinFET at THz Frequency for RF and Microwave Applications”, B. Kumar, R. Chaujar, Proceedings of the 2022 IEEE International RF and Microwave Conference (RFM), December 19-21, 2022, Kuala Lumpur, Malaysia, pp. 1-4. DOI: 10.1109/RFM56185.2022.10065253
- 12.343** To Work No. 5.40 In: “Antenna selection criteria and parameters for IoT applications”, M. Narayan Mohanty, S. Satrusallya, T. Al Smadi, Chapter 18 of book: “Printed Antennas, Design and Challenges” edited by P. Kumar Malik, A. Naim, R. Singh, CRC Press, ISBN: 978-1-032-36555-8, USA, December, 2022, pp. 283-295. DOI: 10.1201/9781003347057-18
- 2023** **12.344** To Work No. 5.44 In: “A New CPW-Fed Semicircular Inverted Triangular Shaped Antenna Based on Mixed-Alternate Approach for 5G Millimeter-Wave Wireless Applications”, P. Soother, H. Wang, Z.A. Dayo, Y. Quan, Micromachines 2023, 14, 220, January 2023, pp. 1-18. DOI: 10.3390/mi14010220
- 12.345** To Work No. 5.12 In: “MOSFET series resistance extraction at cryogenic temperatures”, K. Takeuchi, T. Mizutani, T. Saraya, H. Oka, T. Mori, M. Kobayashi, T. Hiramoto, Japanese Journal of Applied Physics, Vol. 62, No. SC, January 2023, pp. SC1023-1—SC1023-6. DOI: 10.35848/1347-4065/acac3c
- 12.346** To Work No. 5.33 In: “MOSFET series resistance extraction at cryogenic temperatures”, K. Takeuchi, T. Mizutani, T. Saraya, H. Oka, T. Mori, M. Kobayashi, T. Hiramoto, Japanese Journal of Applied Physics, Vol. 62, No. SC, January 2023, pp. SC1023-1—SC1023-6. DOI: 10.35848/1347-4065/acac3c
- 12.347** To Work No. 5.36 In: “MOSFET series resistance extraction at cryogenic temperatures”, K. Takeuchi, T. Mizutani, T. Saraya, H. Oka, T. Mori, M. Kobayashi, T. Hiramoto, Japanese Journal of Applied Physics, Vol. 62, No. SC, January 2023, pp. SC1023-1—SC1023-6. DOI: 10.35848/1347-4065/acac3c
- 12.348** To Work No. 5.32 In: “Time-Efficient Adaptive Procedure for Identification of Multitone X-Parameters”, K. Łukasik, P. Barmuta, T.S. Nielsen, W. Wiatr, D.M.M.P. Schreurs, IEEE Transactions on Instrumentation and Measurement, Vol. 72, 2023, pp. 100609-1-9. DOI: 10.1109/TIM.2022.3232171

- 12.349** To Work No. 5.40 In: “Analysis of Antennas for IoT Environment”, S. Gupta, S. Gupta, S. Katiyar, Proceedings of Second International Conference on Computational Electronics for Wireless Communications, Surathkal, Karnataka, India, January 2023, pp. 31-42. DOI: 10.1007/978-981-19-6661-3_4
- 12.350** To Work No. 5.43 In: “Investigation of the antenna characteristics with the impact of hexagonal metamaterial”, A. Ponnupillai, S. Arunakiri, S.K. Danasegaran, P. Somasundaram, I. Rajkumar, International Journal of Communication Systems, February 2023, pp. 1-18. DOI: 10.1002/dac.5454
- 12.351** To Work No. 5.43 In: “Back Radiation Reduction in a UWB Antenna using Metamaterial Surface for Wireless Communication Devices”, D. Negi, K. Kaur, A. Bansal, B. Dua, N. Singh, S. Dhyani, Proceedings of the 2nd Edition of IEEE Delhi Section Flagship Conference (DELCON), Rajpura, India, 24-26 February 2023, pp. 1-6. DOI: 10.1109/DELCON57910.2023.10127229
- 12.352** To Work No. 5.44 In: “Sequential Non-Linear Programming Optimization: A Novel Design Optimization of a Multiband MIMO Antenna”, S. Selma, H. Khan, B.T.P. Madhav, D. Satwik Reddy, B. Venu, D. Ram Sandeep, Proceedings of the Fifth International Conference on Electrical, Computer and Communication Technologies (ICECCT), Erode, India, February 2023, pp. 1-5. DOI: 10.1109/ICECCT56650.2023.10179634
- 12.353** To Work No. 5.36 In: “A Parameter Extraction Methodology for Graphene Field-Effect Transistors”, K. Jeppson, IEEE Transactions on Electron Devices, Vol. 70, No. 3, March 2023, pp. 1393-1400. DOI: 10.1109/TED.2023.3239331
- 12.354** To Work No. 5.44 In: “Circularly Polarized Parasitic Strips Loaded Broadband Printed Antenna for Sub-6 GHz (n77/n78/n79) Domain”, M.N. Manjunath, A.K. Dwivedi, N.K. Narayanaswamy, A. Sharma, V. Singh, IETE Journal of Research, March 2023, pp. 1-10. DOI: 10.1080/03772063.2023.2183905
- 12.355** To Work No. 5.43 In: “THz antennas design, developments, challenges and applications: A review”, R. Pant, L. Malviya, International Journal of Communication Systems, March 2023, pp. 1-39. DOI: 10.1002/dac.5474
- 12.356** To Work No. 5.40 In: “A CPW-fed dual band four-port MIMO antenna based on liquid crystal polymer for flexible IoT applications”, J. Zhang, C. Du, L. Pei, H. Liu, International Journal of Microwave and Wireless Technologies, March 2023, pp. 1-9. DOI: 10.1017/S1759078723000223

- 12.357** To Work No. 5.17 In: “Analysis of on-chip GSG pads coupling effects on laterally-coupled and double-stacked inductors in the millimeter wave frequency regime”, E.S. Mawuli, K. Kang, International Journal of Numerical Modelling, March 2023, pp. 1-14. DOI: 10.1002/jnm.3110
- 12.358** To Work No. 5.12 In: “Variability of MOSFET Series Resistance Extracted from Individual Devices: Is Direct Variability Measurement Possible?”, K. Takeuchi, T. Mizutani, T. Saraza, M. Kobayashi, T. Hiramoto, Proceedings of the 35th International Conference on Microelectronic Test Structures (ICMTS), Tokyo, Japan, March 27-30, 2023, pp. 1-4. DOI: 10.1109/ICMTS55420.2023.10094106
- 12.359** To Work No. 5.33 In: “Variability of MOSFET Series Resistance Extracted from Individual Devices: Is Direct Variability Measurement Possible?”, K. Takeuchi, T. Mizutani, T. Saraza, M. Kobayashi, T. Hiramoto, Proceedings of the 35th International Conference on Microelectronic Test Structures (ICMTS), Tokyo, Japan, March 27-30, 2023, pp. 1-4. DOI: 10.1109/ICMTS55420.2023.10094106
- 12.360** To Work No. 5.36 In: “Variability of MOSFET Series Resistance Extracted from Individual Devices: Is Direct Variability Measurement Possible?”, K. Takeuchi, T. Mizutani, T. Saraza, M. Kobayashi, T. Hiramoto, Proceedings of the 35th International Conference on Microelectronic Test Structures (ICMTS), Tokyo, Japan, March 27-30, 2023, pp. 1-4. DOI: 10.1109/ICMTS55420.2023.10094106
- 12.361** To Work No. 5.43 In: “Performance Analysis of Metamaterial Patch Antenna Characteristics for Advanced High-Speed Wireless System”, A. Sivasangari, D. Deepa, P. Ajitha, R.M. Gomathi, R. Vignesh, S.K. Danasegaran, S. Poonguzhali, Journal of Electronic Materials, April 2023, pp. 1-8. DOI: 10.1007/s11664-023-10420-y
- 12.362** To Work No. 5.17 In: “Simulation study on the synergistic effect of TID and SEE on SEU sensitivity of SRAM”, L. Yan, C. Rongxing, L. Hongxia, Z. Lin, H. Dan, L. Yang, Z. She, Z. Xianghua, X. Yuxiong, Spacecraft Environment Engineering, Vol. 40, No. 2, April 2023, pp. 170-178. DOI: 10.12126/see.2022109
- 12.363** To Work No. 5.40 In: “Diseño e Implementación de una Antena Compacta para Aplicaciones en Internet de las Cosas en 5G”, José David Velin Sagbay, Tesis de Licenciatura, Universidad Nacional de Chimborazo, Ecuador, May 2023.

- 12.364** To Work No. 5.10 In: “Empirical Study of the Cut-Off Frequency of Multi-Finger Nanometer MOS Transistor”, W.S. Tam, Chi.W. Kok, Solid State Electronics Letters, 4 (2022), May 2023, pp. 30-37. DOI: 10.1016/j.ssel.2023.05.001
- 12.365** To Work No. 5.43 In: “Design of on-chip antennas for THz detector and source in CMOS”, L.J. Xu, X.K. Zhao, X. Bai, IET Microwaves, Antennas and Propagation, May 2023, pp. 1-13. DOI: DOI: 10.1049/mia2.12361
- 12.366** To Work No. 5.38 In: “Modeling and Analysis of T-coils with Improved Quality Factor by Patterned Floating/Ground Shields in Millimeter-Wave Regime”, C. Li, S. Yin, R. Wang, J. Zhang, W. Zhu, Y. Wang, Proceedings of the International Symposium of Electronics Design Automation (ISED A), May 8-11, 2023, Nanjing, China, pp. 390-395. DOI: 10.1109/ISED A59274.2023.10218587
- 12.367** To Work No. 6.084 In: “Compact and Wide Stopband Dual-Mode LTCC Filter for 5G N79 Band Applications”, H. Zhang, Z. Pan, Z. Xu, G. Shi, G. Shen, B. Zhou, Proceedings of the International Conference on Microwave and Millimeter Wave Technology (ICMMT), May 14-17, 2023, Qingdao, China, pp. 1-3. DOI: 10.1109/ICMMT58241.2023.10277645
- 12.368** To Work No. 5.39 In: “Compact and Wide Stopband Dual-Mode LTCC Filter for 5G N79 Band Applications”, H. Zhang, Z. Pan, Z. Xu, G. Shi, G. Shen, B. Zhou, Proceedings of the International Conference on Microwave and Millimeter Wave Technology (ICMMT), May 14-17, 2023, Qingdao, China, pp. 1-3. DOI: 10.1109/ICMMT58241.2023.10277645
- 12.369** To Work No. 6.086 In: “Compact and Wide Stopband Dual-Mode LTCC Filter for 5G N79 Band Applications”, H. Zhang, Z. Pan, Z. Xu, G. Shi, G. Shen, B. Zhou, Proceedings of the International Conference on Microwave and Millimeter Wave Technology (ICMMT), May 14-17, 2023, Qingdao, China, pp. 1-3. DOI: 10.1109/ICMMT58241.2023.10277645
- 12.370** To Work No. 5.35 In: “Étude Par Simulation Et Extraction Des Paramètres Des Caractéristiques (I-V-T) Et (C-V-T) à Travers Les Structures MOS”, A. Belkhir, Doctoral Dissertation, Université Echahid Cheikh Larbi Tebessi-Tébessa, Algiers, May 2023.
- 12.371** To Work No. 6.050 In: “Systematic Characterization for RF small-signal parameter extraction of 28nm FDSOI MOSFETs up to 110GHz”, X. Yang, S. Lee, S. Hong, K. Yang, Microelectronics Journal, Vol. xx, No. Yy, June 2023, pp. 1-9. DOI: 10.1016/j.mejo.2023.105662

- 12.372** To Work No. 5.39 In: "Fusing theory with practice for electronic communications using an on-line simulation tool", A.J. Swart, P.E. Hertzog, World Transactions on Engineering and Technology Education, Vol. 21, No. 2, June 2023, pp. 81-86.
- 12.373** To Work No. 6.084 In: "Fabrication and Characterization of S-Band Compact Dual Mode Close Loop Microstrip Resonator Filter", H. Dashora, U.M. Roy, ICTACT Journal on Communication Technology, Vol. 14, No. 2, June 2023, pp. 2925-2932.
DOI: 10.21917/ijct.2023.0435
- 12.374** To Work No. 5.10 In: "Optimizing RFSOI Performance through a T-shaped Gate and Nano-Second Laser Annealing Techniques", L. Lucci, C. Crémer, B. Duriez, T. Fache, S. Kerdiles, Y. Morand, J.M. Hartmann, J. Azevedo-Goncalves, F. Gaillard, P. Chevalier, Proceedings of the IEEE Radio Frequency Integrated Circuits Symposium (RFIC), San Diego, California, USA, June 2023, pp. 61-64. DOI: 10.1109/RFIC54547.2023.10186137
- 12.375** To Work No. 6.046 In: "Optimizing RFSOI Performance through a T-shaped Gate and Nano-Second Laser Annealing Techniques", L. Lucci, C. Crémer, B. Duriez, T. Fache, S. Kerdiles, Y. Morand, J.M. Hartmann, J. Azevedo-Goncalves, F. Gaillard, P. Chevalier, Proceedings of the IEEE Radio Frequency Integrated Circuits Symposium (RFIC), San Diego, California, USA, June 2023, pp. 61-64. DOI: 10.1109/RFIC54547.2023.10186137
- 12.376** To Work No. 5.43 In: "A miniaturized folded square split ring resonator cell based dual band polarization insensitive metamaterial absorber for C- and Ku-band applications", M. Berka, U. Özkaya, T. Islam, M. El Ghzaoui, S. Varakumari, S. Das, Z. Mahdjoub, Optical and Quantum Electronics, Vol. 55, Article No. 699, June 2023, pp. 1-28. DOI: 10.1007/s11082-023-04954-y
- 12.377** To Work No. 5.17 In: "A 3D FW-EM Simulation-Based PSOD Method for Characterizing On-Wafer Devices Compensating for Short Pattern Error", Y. Shin, S. Nam, Proceedings of the 101st ARFTG Microwave Measurement Conference, San Diego, California, USA, June 16, 2023, pp. 1-4.
DOI: 10.1109/ARFTG57476.2023.10279081
- 12.378** To Work No. 5.24 In: "Design of On-Wafer Calibration Kit for Accurate Pyramid Probe Card-Based Surface Acoustic Wave Filter Measurements", A. Sahu, J. Fendrich, P.H. Aaen, IEEE Transactions on Instrumentation and Measurement, Vol. 72, 1007009, July 2023, pp. 1-9. DOI: 10.1109/TIM.2023.3292950

- 12.379** To Work No. 5.22 In: “A Wideband Physics-Based Model for Coplanar Waveguides with Redistribution Layer Process”, C. Sun, C. Xia, Z. Lu, F. Lin, Y. Xu, L. Sun, IEEE Transactions on Components, Packaging and Manufacturing Technology, Vol. 13, No. 7, July 2023, pp. 1021-1029.
DOI: 10.1109/TCPMT.2023.3296626
- 12.380** To Work No. 6.072 In: “Gender and social differences affecting physics learning of Ecuadorian engineering students”, E.D. Gutiérrez, E. Santacruz, M. Morocho, P. Iza, A. López, Proceedings of the 21st LACCEI International Multi-Conference for Engineering, Education, and Technology 2023, Buenos Aires, Argentina, July 17-21, 2023, pp. 1-9.
- 12.381** To Work No. 5.12 In: “Reliability Investigations of MOSFETs using RF Small Signal Characterization”, T. Chohan, Doctoral Dissertation, Technical University of Dresden, Germany, July 2023.
- 12.382** To Work No. 5.43 In: “Analysis of Wave Propagation in Hybrid Metamaterial Structure for Terahertz Applications”, S. Lalithakumari, S.K. Danasegaran, G. Rajalakshmi, R. Pandian, E.C. Britto, Brazilian Journal of Physics, 53:140, August 2023, pp. 1-10. DOI: 10.1007/s13538-023-01351-4
- 12.383** To Work No. 5.36 In: “Capacitance and Mobility Evaluation for Normally-Off Fully-Vertical GaN FinFETs”, P. Gribisch, R. Delgado-Carrascón, V. Darakchieva, E. Lind, IEEE Transactions on Electron Devices, Vol. 70, No. 8, August 2023, pp. 4101-4107.
DOI: 10.1109/TED.2023.3287820
- 12.384** To Work No. 5.47 In: “Design of a Crossed Dielectric Resonator-Loaded, Dual-Band Dual-Polarized Differential Patch Antenna with Improved Port Isolation and Gain”, C. Li, S. Yin, R. Wang, J. Zhang, W. Zhu, Y. Wang, Electronics, Vol. 12 (3570), August 2023, pp. 1-10. DOI: 10.3390/electronics12173570
- 12.385** To Work No. 5.12 In: “Novel extraction method for contact resistance and effective mobility in carbon nanotube field-effect transistors using S-parameter measurements”, Y. Zhang, Y. Yang. T. Yang, Y. Zhang, Results in Physics, September 2023, pp. 1-10.
DOI: 10.1016/j.rinp.2023.106999
- 12.386** To Work No. 5.24 In: “Artificial neural network model-based optimization on the mapping between equivalent circuit model and physical field model”, Chandan Roy, Doctoral Dissertation, Polytechnique Montreal, September 2023.

- 12.387** To Work No. 5.28 In: “A High-PCE Range-Extension CMOS Rectifier Employing Advanced Topology Amalgamation Technique for Ambient RF Energy Harvesting”, A. Choo, Y.C. Lee, H. Ramiah, Y. Chen, P.I. Mak, R.P. Martins, IEEE Transactions on Circuits and Systems II: Express Briefs, Vol. 70, No. 10, October 2023, pp. 3747-3751. DOI: 10.1109/TCSII.2023.3285977
- 12.388** To Work No. 5.36 In: “A Simple Method for Series Resistance Extraction in Ultrascaled FinFETs Using Flicker Noise”, J. Wu, P. Ren, Z. Ji, IEEE Transactions on Electron Devices, Vol. 70, No. 11, November 2023, pp. 6078-6081. DOI: 10.1109/TED.2023.3319457
- 12.389** To Work No. 5.39 In: “Single— and Dual-Band Bandpass Filters Based on a Novel Microstrip Loop-Type Resonator Loaded with Shorted Stubs”, J.M. Yan, B.J. Kang, Y. Yang, L. Cao, Progress in Electromagnetic Research Letters, Vol. 113, November 2023, pp. 61-67. DOI: 10.2528/PIERL23083105
- 12.390** To Work No. 5.12 In: “GaN-on-Si technology for modern wireless communication systems: Optimisation insight using RF characterisation”, Rana Y. ElKashlan, Doctoral Dissertation, Vrije Universiteit Brussel, Brussels, Belgium November 2023.
- 12.391** To Work No. 5.12 In: “Efficient RF Small-Signal Parasitic Parameters Extraction Technique for The Advanced MOSFETs”, D. Maafri, B. Zatout, Y. Belaroussi, M.C.E. Yagoub, Proceedings of the 2nd International Conference on Electronics, Energy and Measurement (IC2EM 2023), Medea, Algeria, November 28-29, 2023, pp. 1-5. DOI: 10.1109/IC2EM59347.2023.10419439
- 12.392** To Work No. 5.40 In: “T-Slot Antennas-Embedded ZigBee Wireless Sensor Network System for IoT-Enabled Monitoring and Control Systems”, A. Romputtal, C. Phongcharoenpanich, IEEE Internet of Things Journal, Vol. 10, No. 23, December 2023, pp. 20834-20845. DOI: 10.1109/JIOT.2023.3284005
- 12.393** To Work No. 5.36 In: “Radiation-induced degradation of silicon carbide MOSFETs – A review”, T. Baba, Na. Siddiqui, N.B. Siding, S.H.M. Yusoff, S.F.B.A. Sani, J.A. Karim, N.F. Hasbullah, Materials Science and Engineering B, 300, 117096, December 2023, pp. 1-13. DOI: 10.1016/j.mseb.2023.117096
- 12.394** To Work No. 5.36 In: "Electrical Performance Determination and Stress Reliability Estimation of ALD-Derived $\text{Er}_2\text{O}_3/\text{InP}$ Heterointerface", L. Qiao, G. He, S. Jiang, Y. Liu, J. Lu, Q. Wu, Z. Fang, IEEE Transactions on Electron Devices, Vol. 70, No. 12, December 2023, pp. 6125-6131. DOI: 10.1109/TED.2023.3326135

- 12.395** To Work No. 5.07 In: “Fully Monolithic 1A Thermoelectric Cooler Controller with 90% Efficiency”, S. Sowmyaashree, H. Shrimali, Proceedings of the 30th IEEE International Conference on Electronics, Circuits and Systems (ICECS), Istanbul, Turkey, December 2023, pp. 1-4.
DOI: 10.1109/ICECS58634.2023.10382722
- 2024** **12.396** To Work No. 5.24 In: “A Generalized Circuit Model Development Approach with Short Open Thru (SOT) De-Embedding Technique and its Applications”, C. Roy, K. Wu, IEEE Transactions on Microwave Theory and Techniques, Vol. 72, No. 1, January 2024, pp. 124-137. DOI: 10.1109/TMTT.2023.3288567
- 12.397** To Work No. 5.43 In: “Symmetrically structured epsilon negative meta material for antenna gain enhancement”, M. Moniruzzaman, M. Mubarak, A. Alqahtani, T. Rahman, M.T. Islam, M. Samsuzzaman, Optical Materials, 148 (114777), January 2024, pp. 1-12. DOI: 10.1016/j.optmat.2023.114777
- 12.398** To Work No. 5.43 In: “Simulation of Wave Propagation in Plasma-Metamaterial Composites Based on Plasma Parameters and Metamaterial Structures”, A.N. Dagang, A. Harikrishnan, N.A.M. Kamari, Journal of Advanced Research in Applied Sciences and Engineering Technology, Vol. 37, No. 2, January 2024, pp. 36-47. DOI: 10.37934/araset.37.2.3647
- 12.399** To Work No. 5.35 In: “Threshold Voltage Extraction Using Conductance-Voltage Method for Nano-Organic/Oxide Thin-Film Transistors: Comparative Study of P- and N-Type Devices”, I.P. Krishna, R. Agarwal, Physica Status Solidi a, January 2024, pp. 1-11. DOI: 10.1002/pssa.202300746
- 12.400** To Work No. 5.47 In: “Three-Dimensional Printed Annular Ring Aperture-Fed Antenna for Telecommunication and Biomedical Applications”, K. Alhassoon, Y. Malallah, F.N. Alsunaydih, F. Alsaleem, Sensors 24 949, February 2024, pp. 1-15.
DOI: 10.3390/s24030949
- 12.401** To Work No. 5.12 In: “Small-signal non-quasi-static model of a multi-fin FinFET for analog and linearity analysis: the role of gate resistance”, J. Patel, N. Aggarwal, N. Bagga, V. Kumar, S. Dasgupta, Journal of Computational Electronics, February 2024, pp. 1-11. DOI: 10.1007/s10825-023-02127-4
- 12.402** To Work No. 5.20 In: “Enhanced Magnetic Field Sensing with MAGNC-FinFET: A Current Mode Hall effect Approach”, R.K. Maurya, R.G. Debnath, R. Saha, B. Bhowmick, IEEE Transactions on Nanotechnology, Vol. 23, March 2024, pp. 250-256.
DOI: 10.1109/TNANO.2024.3373035

- 12.403** To Work No. 5.43 In: “Photonic crystal based hourglass patch antenna for the detection of breast cancer”, R. Pandian, S.K. Danasegaran, S. Lalithakumari, G. Rajalakshmi, C.S. Kumar, *Optical and Quantum Electronics*, 56:763, March 2024, pp. 1-11. DOI: 10.1007/s11082-024-06657-4
- 12.404** To Work No. 5.40 In: “Performance Signature and Analysis of Patterned Surfaces Trapezoidal Patch Antenna Array with Defected Ground Structure”, RS. Santhanam, M. Alagarsamy, P.T. Selvan, A.N.Z. Rashed, S.H. Ahammad, A. Hossain, *Journal of The Institution of Engineers (India): Series B*, March 2024, pp. 1-11. DOI: 10.1007/s40031-024-01041-y
- 12.405** To Work No. 5.43 In: “Miniaturized flexible UWB Antenna Design using Double-Negative Metamaterial structure with enhanced Radiation Gain”, N. Deepa, B. Aarti, *Proceedings of the 2024 IEEE International Conference on interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI)*, Gwalior, India, 14-16 March 2024, pp. 1-5. DOI: 10.1109/IATMSI60426.2024.10502460
- 12.406** To Work No. 5.40 In: “A comprehensive review on surface modifications of polymer-based 3D-printed structures: Metal coating prospects and challenges”, K. Gautam, D. Gogoi, T.D. Kongnyui, S. Devi, C. Kumar, M. Kumar, *Polymers for Advanced Technologies*, Vol. 35, No. 4, April 2024, pp. 1-29. DOI: 10.1002/pat.6369
- 12.407** To Work No. 6.090 In: “Bibliometric Analysis of Reconfigurable Antennas in Radar Applications: Trends, Influential Authors, and Future Directions”, D.N. Gençoğlan, Chapter 3 in book “Radar and RF Front End System Designs for Wireless Systems”, ISBN13: 9798369309162, April 2024, pp. 57-91. DOI: 10.4018/979-8-3693-0916-2.ch003
- 12.408** To Work No. 5.24 In: “The Role of Interdigitated Electrodes in Printed and Flexible Electronics”, S. Habboush, S. Rojas, N. Rodríguez, A. Rivadeneyra, *Sensors*, 24, 2727, April 2024, pp. 1-37. DOI: 10.3390/s24092717
- 12.409** To Work No. 5.43 In: “Design and investigation of pentagonal shaped split ring resonator based micro strip patch antenna for high-speed Terahertz applications”, K. Mahendran, S.K. Danasegaran, R. India, S.A.A. Preethi, *Journal of Optoelectronics and Advanced Materials*, Vol. 26, No. 3-4, March-April 2024, pp. 106-114. DOI:

- 12.410** To Work No. 5.36 In: Supplementary Information to “Compact Modeling of Hysteresis in Organic Thin-Film Transistors”, A. Romero, J.A. Jiménez-Tejada, R. Picos, D. Lara, J.B. Roldán, M.J. Deen, *Organic Electronics*, 129 107048, April 2024, pp. 1-20. DOI: 10.1016/j.orgel.2024.107048
- 12.411** To Work No. 5.40 In: “Design of a Fractal-inspired Monopole Antenna for S-band, IoT and RFID applications”, T.K. Das, M.A.W. Mallick, H. Vasireddy, D. Agarwal, A. Laghate, H. Singh, *Proceedings of the 3rd International Conference on Artificial Intelligence for Internet of Things (AllIoT)*, Vellore, India, May 3-4 2024, pp. 1-4. DOI: 10.1109/AllIoT58432.2024.10574736
- 12.412** To Work No. 5.17 In: “A 1.6-mW Cryogenic SiGe LNA IC for Quantum Readout Applications Achieving 2.6-K Average Noise Temperature From 3 to 6 GHz”, Z. Zou, S. Raman, J.C. Bardin, *IEEE Microwave and Wireless Technology Letters*, Vol. 34, No. 6, June 2024, pp. 753-756. DOI: 10.1109/LMWT.2024.3395114
- 12.413** To Work No. 5.44 In: “Quad Port P-shaped MIMO Antenna Array for 60 GHz Applications”, M.D. Alanazi, W.A.E. Ali, A.M. Ameen, A.A. Ibrahim, B.M. Yousef, *Heliyon*, Vol. 10, No. 12, E33021, June 2024, pp. 1-15. DOI: 10.1016/j.heliyon.2024.e33021
- 12.414** To Work No. 5.47 In: “3D Printed Patch Antenna Design with Coplanar Waveguide Feed for Ultra Wideband Wireless Communication Applications”, M. Yerlikaya, I. Kuslay, H. Duysak, *Journal of Engineering and Natural Sciences*, Vol. 6, No. 1, June 2024, pp. 44-50. DOI: 10.55213/kmujens.1465533
- 12.415** To Work No. 5.45 In: “The Impact of a Taper Impedance Transformation on the TRL De-Embedding Error”, J. Louro, L.C. Nunes, F.M. Barradas, P.M. Cabral, J.C. Pedro, *IEEE Journal of Microwaves*, Vol. 4, No. 3, July 2024, pp. 389-403. DOI: 10.1109/JMW.2024.3405018
- 12.416** To Work No. 5.47 In: “Metasurface loaded dual band antenna for high gain on— and off— body communication”, E.M. Ali, T. Islam, W.A. Awan, M.S. Alzaidi, R. Alkanhel, D.E. Elkamchouchi, *Physica Scripta*, Vol. 99, No. 8, July 2024, pp. 1-13. DOI: 10.1088/1402-4896/ad5ec6
- 12.417** To Work No. 5.22 In: “Equivalent Circuit Model of the Carrier-Depletion-Based Push-Pull Silicon Optical Modulators with T-Rail Slow Wave Electrodes”, D. Zhuang, Q. Na, Q. Xie, N. Zhang, L. Zhang, X. Li, G. Zuo, H. Zhang, L. Wang, L. Qin, J. Song, *IEEE Photonics Journal*, Vol. 16, No. 4, August 2024, pp. 1-9. DOI: 10.1109/JPHOT.2024.3427830

- 12.418** To Work No. 5.48 In: “High-Speed Signal Optimization at Differential VIAs in Multilayer Printed Circuit Boards”, W.J. Xu, D.J. Xin, L. Yang, Y.K. Zhou, D. Wang, W.X. Li, *Electronics* 13, 3377, August 2024, pp. 1-11. DOI: 10.3390/electronics13173377
- 12.419** To Work No. 5.12 In: “Empirical large-signal modeling of 22-nm FDSOI CMOS transistors in RF/mm-Wave range”, Quang Huy Le, Tesis Doctoral, Brandenburg University of Technology, Germany, August 2024. DOI: 10.26127/BTUOpen-6807
- 12.420** To Work No. 6.050 In: “Empirical large-signal modeling of 22-nm FDSOI CMOS transistors in RF/mm-Wave range”, Quang Huy Le, Tesis Doctoral, Brandenburg University of Technology, Germany, August 2024. DOI: 10.26127/BTUOpen-6807
- 12.421** To Work No. 5.31 In: “Empirical large-signal modeling of 22-nm FDSOI CMOS transistors in RF/mm-Wave range”, Quang Huy Le, Tesis Doctoral, Brandenburg University of Technology, Germany, August 2024. DOI: 10.26127/BTUOpen-6807
- 12.422** To Work No. 5.41 In: “A SPICE-Compatible Model for On-Chip Coplanar Coupled Waveguides Up to 110 GHz”, H.S. Yin, X. Lin, C.Y. Yao, D.W. Wang, Q.Q. Liu, C.H. Yu, W.S. Zhao, *Proceedings of the 7th IEEE International Conference on Electronic Information and Communication Technology (ICEICT)*, July-August 2024, pp. 412-415. DOI: 110.1109/ICEICT61637.2024.10671010
- 12.423** To Work No. 6.089 In: “Advancements in Breast Cancer Detection through Broadband Microstrip Antenna Technology”, A. Alsaraira, O.A. Saraereh, S. Alabed, *International Journal of Online and Biomedical Engineering*, Vol. 20, No. 13, August 2024, pp. 41-59. DOI: 10.3991/ijoe.v20i13.50509
- 12.424** To Work No. 5.40 In: “Design of a Wideband Slotted Monopole Antenna for C-band and RFID Applications”, T.K. Das, Y. Kuldeep, P. Singh, P. Ramji, A. Prasad. S.R. Iyer, *Proceedings of the Control Instrumentation System Conference (CISCON)*, Manipal, India, August 2-3 2024, pp. 1-5.
DOI: 10.1109/CISCON62171.2024.10696233
- 12.425** To Work No. 5.36 In: “Characterization and Study on MOSFET Source/Drain Series Resistance Down to 4 K”, Y. Lin, T. Wen, Y. Shou, S. Li, Z. Ma, H. Su. S. Zhou, Y. Li, L. Lin, H. Yu, K. Chen, , *Proceedings of the IEEE International Symposium on Radio Frequency Integration Technology (RFIT)*, Chengdu, China, August 28-30 2024, pp. 1-3. DOI: 10.1109/RFIT60557.2024.10812512

- 12.426** To Work No. 5.47 In: “A Dual-Band Wideband Antenna on Thin Polyimide Film with Rectangular Slot-Loaded DGS”, M.F.M, Omar, S.K.A. Rahim, M.F. Ain, A.A. Manaf, E.H. Lim, Proceedings of the 2024 IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications (APWC), Lisbon, Portugal, September 2-6, 2024, pp. 79-83.
DOI: 10.1109/APWC61918.2024.10701767
- 12.427** To Work No. 5.21 In: “Hotspot Estimation for Antenna-Less Backscatter Communication Using Excited Impedance Analysis”, J. Cha, C. Park, Y. Park, Journal of Electromagnetic Engineering and Science, September 2024, pp. 1-7. DOI: 10.26866/jees.2024.2.r.257
- 12.428** To Work No. 5.36 In: “Threshold Voltage Extraction of nMOSFET Devices in Photovoltaic Inverters”, S. Zhang, D. Wang, Y. Guo, Y. Wu, X. Cao, L. Zhang, Y. Che, Journal of Physics: Conference Series, Vol. 2843, 012017, September 2024, pp. 1-7.
DOI: 10.1088/1742-6596/2843/1/012017
- 12.429** To Work No. 5.10 In: “A Process-Aware Analytical Gate Resistance Model for Nanosheet Field-Effect Transistors”, J. Suk, Y. Kim, J. Do, G. Kim, W. Rim, S. Baek, S. Yoon, S. Kim, IEEE Journal of the Electron Devices Society, Vol. 12, September 2024, pp. 898-904. DOI: 10.1109/JEDS.2024.3469917
- 12.430** To Work No. 5.36 In: “Predictive Simulation of Nanosheet Transistors including the Impact of Access Resistance”, T. Dutta, F. Adamu-Lema, N. Xenj, A. Rezaei, A. Dixit, I. Topaloglu, V. Georgiev, A. Asenov, Proceedings of the 2024 International Conference on Simulation of Semiconductor Processes and Devices (SISPAD), San José California, September 24-27, 2024, pp. 1-4. DOI: 10.1109/SISPAD62626.2024.10733048
- 12.431** To Work No. 5.25 In: “Reconfigurable Antennas for Wireless Communication: Design Mechanism, State of the Art, Challenges, and Future Perspectives”, M. Zhang, G. Xu, R. Gao, International Journal of Antennas and Propagation, Vol. 2024, Article ID 3046393, October 2024, pp. 1-41. DOI: 10.1155/2024/3046393
- 12.432** To Work No. 5.43 In: “Compact Metamaterial based Antenna for 5G Applications”, A.C.J. Malathi, A.S.K. Narayanan, A. Ms, Results in Engineering, Vol. 24, October 2024, pp. 1-8. DOI: 10.1016/j.rineng.2024.103269
- 12.433** To Work No. 5.17 In: “Direct Extraction Methods for RF Characterization of Extrinsic Parasitic Parameters in 28 nm FDSOI MOSFETs up to 110 GHz”, X. Yang, K. Yang, IEEE Journal of the Electron Devices Society, Vol. 12, November 2024, pp. 993-1002.
DOI: 10.1109/JEDS.2024.3486736

- 12.434** To Work No. 5.40 In: "Modified back-line inset feed 1x4 array microstrip antenna for 5.8 GHz frequency band", Md.F. Hasan, D.A.A. Mat, Md.A. Sayed, Indonesian Journal of Electrical Engineering and Computer Science, Vol. 36, No. 2, November 2024, pp. 892-900. DOI: 10.11591/ijeecs.v36.i2.pp892-900
- 12.435** To Work No. 5.20 In: "Modeling and Measurement of CMOS-Based Three-Axis Magnetic Field Sensors With Low Cross-Sensitivity", Z.X. Dai, M.H. You, IEEE Sensors Journal, Vol. 24, No. 21, November 2024, pp. 34217-34227. DOI: 10.1109/JSEN.2024.3452109
- 12.436** To Work No. 5.38 In: "CMOS On-Chip Integrated Transformers Comparison", M. Derkaoui, Y. Benhadda, A. Hamid, IProceedings of the 3rd International Conference on Advanced Electrical Engineering (ICAEE), Sidi-Bel-Abbes, Algeria, November 5-7 2024, pp. 1-4. DOI: 10.1109/ICAEE61760.2024.10783324
- 12.437** To Work No. 5.43 In: "Flexible Broadband Metamaterial Absorber based on Multilayer Structure in GHz Frequency Range", D.T. Chi, D.T. Ha, B.X. Khuyen, B.S. Tung, N.N. Viet, V.T.H. Hanh, V.D. Lam, TNU Journal of Science and Technology, Vol. 229, No. 14, November 2024, pp. 331-3389. DOI: 10.34238/tnu-jst.11409
- 12.438** To Work No. 5.17 In: "An Inventional De-Embedding Technique for Signal Leakage Up to 110 ghz", D. He, H. Min, Current Science, Vol. 4, No. 6, December 2024, pp. 846-852. DOI: 10.52845/CS/2024-4-6-8
- 12.439** To Work No. 5.47 In: "Low-Profile Bi-Slot Dual-Band (2.45/5.76GHz) Antenna for Wireless Communication Systems", A.A.A. Rimi, A. Zugari, M. El Ouahabi, M. Khalladi, Jordanian Journal of Computers and Information Technology, Vol. 10, No. 4, December 2024, pp. 383-392. DOI: 10.5455/jjcit.71-1715034955
- 12.440** To Work No. 5.31 In: "Modeling and Parasitic Extraction of the MM9 Transistor for GHz/THz CMOS RF Circuit Design", A.K. Gadige, Paramesha, Journal of Electronic Testing, Vol. 40, December 2024, pp. 795-804. DOI: 10.1007/s10836-024-06154-2
- 2025** **12.441** To Work No. 5.20 In: "Sensitivity Analysis and Performance Trade-offs in Regression Neural Networks for Magnetic Field Sensing with Rectangular MOS Transistors", J.H. Lee, Y. Lee, IEEE Sensors Journal, Vol. 25, No. 1, January 2025, pp. 1851-1859. DOI: 10.1109/JSEN.2024.3492048

- 12.442** To Work No. 5.20 In: “Investigation of Noise and Resolution of Magnetic FinFET (MAG-FinFET)”, K.T.N. Swe, A. Poyai, T. Phetchakul, IEEE Sensors Journal, Vol. 25, No. 2, January 2025, pp. 2479-2486. DOI: 10.1109/JSEN.2024.3506585
- 12.443** To Work No. 5.38 In: “Comparative study of planar stacked integrated transformers for MMICs”, M. Derkaoui, Y. Benhadda, A. Hamid, Integration, the VLSI journal, 102, 102346, January 2025, pp. 1-8. DOI: 10.1016/j.vlsi.2025.102346
- 12.444** To Work No. 5.36 In: “Low-Frequency Noise Related to the Scattering Effect in p-Type Copper(I) Oxide Thin-Film Transistors”, J. Yoo, S. Park, H. Lee, S. Lim, H. Song, M. Park, S. Kim, J.H. Jeong, J.W. Bong, K. Heo, K. Lee, T.W. Kim, P.D. Ye, Applied Materials and Interfaces, 17, January 2025, pp. 3538-3547. DOI: 10.1021/acsami.4c14876
- 12.445** To Work No. 5.23 In: “Blue-Shifting Photoluminescence in HFCVD-Deposited Tin-Doped SRO Films”, D. Díaz-Tapia, C. Morales-Ruiz, R. Galeazzi-Usasmendi, H. Pérez-Ladrón de Guevara, R. Portillo, R. Romano-Trujillo, A. Coyopol, E. Rosendo, European Journal Of Engineering and Technology Research, Vol. 10, No. 1, January 2025, pp. 26-32. DOI: 10.24018/ejeng.2025.10.1.3225
- 12.446** To Work No. 6.084 In: “Miniaturized Intermediate-Frequency Filter for BeiDou Navigation Satellite System”, Q. Kewei, T. Miao, Microwave and Optical Technology Letters, Vol. 67, No. 1, January 2025, pp. 1-5. DOI:10.1002/mop.70106
- 12.447** To Work No. 5.36 In: “Comprehensive analysis of MOSFET threshold voltage extraction method considering DIBL effect from 300 K down to 10 K”, Z. Ma, H. Su, Y. Lin, S. Zhou, X. Liu, L. Lin, Y. Li, K. Chen, Solid State Electronics, Vol. 224, 109045, February 2025, pp. 1-9. DOI: 10.1016/j.sse.2024.109045
- 12.448** To Work No. 5.43 In: “Metasurface-Based Nanoantenna for Submillimeter Wave Application”, P. Gupta, E.V. Bhavya, S. Kumari, B. Chowdhury, R.U. Nair, Chapter in book “Handbook of Nano-Materials”, Springer Singapore, 978-981-13-0261-9, February 2025, pp. 1-21. DOI: 10.1007/978-981-13-0261-9_49-1
- 12.449** To Work No. 5.47 In: “Design of a Miniaturized Dual-Band Antenna using Slotted Techniques for 2.45/5.8 GHz Microwave Band RFID Utilizations”, Y. El Hachimi, E.M. Louragli, S.A.N. Arockiam, V. Subramanian, S. Das, A. Farchi, Engineering, Technology & Applied Research, Vol. 15, No. 1, February 2025, pp. 20018-20023. DOI: 10.48084/etasr.9843

- 12.450** To Work No. 6.082 In: “Characterization and Modeling of MOSFET Series Resistance Down to 4 K”, Y. Lin, ZZ.. Ma, S. Li, T.Y. Wen, Y.X. Zhou, H. Su, S. Zhou, L. Lin, Y. Li, K. Chen, IEEE Journal of the Electron Devices Society, Vol. 13, March 2025, pp. 297-302. DOI: 10.1109/JEDS.2025.3544738
- 12.451** To Work No. 5.36 In: “Characterization and Modeling of MOSFET Series Resistance Down to 4 K”, Y. Lin, ZZ.. Ma, S. Li, T.Y. Wen, Y.X. Zhou, H. Su, S. Zhou, L. Lin, Y. Li, K. Chen, IEEE Journal of the Electron Devices Society, Vol. 13, March 2025, pp. 297-302. DOI: 10.1109/JEDS.2025.3544738
- 12.452** To Work No. 5.43 In: “Exploring the structural features of triangular fractal antenna for detection of brain tumor”, P.B. Palas, K. Rahimunnisa, Ain Shams Engineering Journal, Vol. 16, March 2025, pp. 1-11. DOI: 10.1016/j.asej.2025.103369
- 12.453** To Work No. 5.40 In: “Microstrip Patch Antenna in WiMAX, ISM and L-band for Sub-6 GHz Application. Review”, A.R. Chaudhari, D.P. Patil, Devices and Methods of Measurements, Vol. 16, No. 1, March 2025, pp. 1-17. DOI: 10.21122/2220-9506-2025-16-1-7-23
- 12.454** To Work No. 5.43 In: “Novel Antenna-Based Metamaterial Structure with Slotted and Parasitic Patches For 5G- Sub 6 GHz Applications”, F. Taher, B.S. Bashar, T.A. Elwi, H. Misran, Z.A. Rhazali, M.M. Ismail, M. Abdel-aleim M., M.F.A. See, S.Y.A. Fatah, Journal of Advanced Research in Applied Sciences and Engineering Technology, Vol. 65, No. 2, March 2025, pp. 143-152. DOI: 10.37934/araset.65.2.143152
- 12.455** To Work No. 5.44 In: “Design strategies and performance of IoT antennas: a comprehensive review”, A. Hassan, N. Nizam-uddin, A. Quddus, S.R. Hassan, S. Bharany, A.U. Rehman, S. Hussien, Discover Computing, Vol. 28, Article No. 39, April 2025, pp. 1-60. DOI: 10.1007/s10791-025-09536-y
- 12.456** To Work No. 5.47 In: “Research of the Frequency Characteristics of the Semiconductor Linear Microstrip Patch Antenna”, V. Breivė, A. Katkevičius, R. Pomarnacki, D. Belova-Plonienė, A. Krukoniš, T. Sledevič, S. Mikučionis, D. Plonis, Proceedings of the 2025 IEEE Open Conference on Electrical, Electronic and Information Sciences (eStream), Vilnius, Lithuania, April 22-24 2025, pp. 1-5. DOI: 10.1109/eStream66938.2025.11016890
- 12.457** To Work No. 5.47 In: “A Triple Band Square Shape Multi-slot Defective Ground Structure Patch Antenna for C-, X-, and Ku-band Applications”, S. Kelli, S. Aouthu, Y. Srinivas, V.S. Reddy, R. Paula, M. Valathuru, N. Prasad, Journal of Nano- and Electronic Physics, Vol. 17, No. 2, 02023, April 2025, pp. 1-5. DOI: 10.21272/jnep.17(2).02023

- 12.458** To Work No. 5.36 In: “High Performance 2-Tier FinFETs with Low-Temperature (≤ 500 C) Silicide Dopant Segregation Schottky S-D for M3D Circuits”, F. Wang, Y. Zhang, Y. Bro, S. Liu, X. Zhang, S. Mao, M. Ding, J. Liu, J. Yao, Q. Zhang, H. Yin, IEEE Electron Device Letters, Vol. 46, No. 5, May 2025, pp. 1-4. DOI: 10.1109/LED.2025.3553873
- 12.459** To Work No. 5.40 In: “Improved Performance of 1 x 2 Circular Polarized Antenna Array Design for ISM Band Applications”, M. El-Kahiri, W. En-Naghma, O. Sarah, M. Jabbar, H. Halaq, A. El-Ougli, Proceedings of the 2025 5th International Conference on Innovative Research in Applied Science, Engineering and Technology (IRASET), Fez, Morocco, May 15-16 2025, pp. 1-5. DOI: 10.1109/IRASET64571.2025.11008120
- 12.460** To WorkNo. 5.40 In: “Improved Performance of 1 x 2 Circular Polarized Antenna Array Design for ISM Band Applications”, M. El-Kahiri, W. En-Naghma, O. Sarah, M. Jabbar, H. Halaq, A. El-Ougli, Proceedings of the 2025 5th International Conference on Innovative Research in Applied Science, Engineering and Technology (IRASET), Fez, Morocco, May 15-16 2025, pp. 1-5. DOI: 10.1109/IRASET64571.2025.11008120
- 12.461** To WorkNo. 5.20 In: “Probing vertical magnetic fields with negative capacitance GAA-FinFET: sensitivity and performance analysis”, R.G. Debnath, R.K. Maurya, R.K. Pathak, B. Bhowmick, Physica Scripta, Vol. 100, 065007, May 2025, pp. 1-10. DOI: 10.1088/1402-4896/add2a2
- 12.462** To WorkNo. 5.10 In: “Improved Resistance Model for MOSFET Gate with High Accuracy Based on Measurements Results for Simulation Verification”, J. Lee, J. King, J. Shin, S. Jung, D. Lee, D. Park, J. Park, T. Lee, S. Lee, Proceedings of the IEEE 34th Microelectronics Design & Test Symposium (MDTS), 19-21 May 2025, Albany, NY, USA, pp. 1-4. DOI: 10.1109/MDTS64924.2025.11177090
- 12.463** To WorkNo. 5.22 In: “Improved Equivalent Circuit Model of BGA and RDL Combined Interconnection for 3D Packaging”, Y. Liu, H. Wang, J. Li, H. Liu, Y. You, C. Zhao, Q. Zhang, K. King, Proceedings of the IEEE MTT-S International Wireless Symposium (IWS), 19-22 May 2025, Xi'an, China, pp. 1-3. DOI: 10.1109/IWS65943.2025.11177754
- 12.464** To WorkNo. 5.42 In: “Wideband Equivalent Circuit Modeling and Parameter Extraction Method for Through Via in Ceramic Package Substrate”, P. Ren, C. Wang, Y. Liang, X. Zhao, X. Li, D. Pingan, Journal of Electronic Packaging, Vol. 147, No. 2, June 2025, pp. 331-339. DOI: 10.1115/1.4067269

- 12.465** To WorkNo. 5.47 In: “The Design and Performance Evaluation of Compact, Low-Cost Rectenna on a 3D-Printed Composite Substrate for Sustainable IoT Devices”, B. Atanasov, N. Atanasov, G. Atanasova, *Electronics*, Vol. 14, 2625, June 2025, pp. 1-17. DOI: 10.3390/electronics14132625
- 12.466** To WorkNo. 5.40 In: “Enhanced Design and Performance of a 1x2 Circularly Polarized Antenna Array for ISM Band Applications at 5.8 GHz”, M. Jabbar, W. En-Naghma, M. El-Kahiri, O. Salah, A. El-Ougli, H. Halaq, *Proceedings of the 2025 International Conference on Circuit, Systems and Communication (ICCSC)*, Fez, Morocco, June 19-20, 2025, pp. 1-6. DOI: 10.1109/ICCSC66714.2025.11135327
- 12.467** To WorkNo. 6.090 In: “A Review of Reconfigurable Antenna Types and Mechanisms for Wireless Communications: IoT Applications”, A. Elabdi, M. El-Ayachi, M. Rahmoun, A. Lamkaddem, *Proceedings of the 2025 International Conference on Circuit, Systems and Communication (ICCSC)*, Fez, Morocco, June 19-20, 2025, pp. 1-8. DOI: 10.1109/ICCSC66714.2025.11135324
- 12.468** To WorkNo. 5.40 In: “Design and Implementation of a 4x2 Diamond Patch Array Microstrip Antenna with I-Slot for 2.4 GHz Frequency”, A.D. Ayra, K. Koesmarijanto, H. Hudiono, *Journal of Telecommunication Network (Jurnal Jaringan Telekomunikasi)* Vol. 15, No.2, June 2025, pp. 233-238. ISSN 2654-6531
- 12.469** To WorkNo. 5.31 In: “In-Circuit Impedance Extraction of Individual Components in Power Converter Using Capacitive Coupling Fixture Adapters Method for Electromagnetic Interference Estimation”, W. Su, H. Li, Z. Zhao, B. Zhang, C. Ji, D. He, X. Liu, Z. Wang, *IEEE Transactions on Industrial Electronics*, Vol. 72, No. 7, July 2025, pp. 7616-7627. DOI: 10.1109/TIE.2024.3515271
- 12.470** To WorkNo. 5.47 In: “Dual-band aperture-shared antenna with pattern and polarization diversities for ISM applications”, W. Yin, J. Si, C. Li, S.K. Khamas, *Journal of Electromagnetic Waves and Applications*, July 2025, pp. 1-14. DOI: 10.1080/09205071.2025.2530627
- 12.471** To WorkNo. 5.40 In: “Wideband Antenna Design with Notched Flower Shaped Patch for Wireless Applications”, B.D. Prajapati, B. Jaiswal, P.J. Dalvadi, *Progress in Electromagnetic Research C*, Vol. 158, July 2025, pp. 1-8. DOI: 10.2528/PIERC25061101
- 12.472** To WorkNo. 5.40 In: “A low-cost miniaturized circular patch antenna used for 5G mobile applications”, R. Tabet-Derraz, A. Bearkat, N. Boukli-Hacene, *Przegląd Elektrotechniczny*, Vol. 2025, No. 7, July 2025, pp. 127-133. DOI: 10.15199/48.2025.07.21

- 12.473** To WorkNo. 5.40 In: “A six element antenna array for 5G application”, S. Satrusallya, S. Mahapatra, K.P. Sharmila, M.N. Mohanty, Chapter 15 in book “Intelligent Computing Techniques and Applications”, ISBN: 978-1-0411-1085-9, August 2025, pp. 61-64. DOI: 10.1201/9781003658221-15
- 12.474** To WorkNo. 5.47 In: “Miniaturized EBG Antenna for Efficient 5.8 GHz RF Energy Harvesting in Self-Powered IoT and Medical Sensors”, Y. Alaihani, R. Akram, A.M. Almohaimeed, Z.M. Almohaimeed, L.O. Buhari, M. Shaban, *Sensors* 2025,25(15),4777, August 2025, pp. 1-20. DOI: 10.3390/s25154777
- 12.475** To WorkNo. 5.47 In: “Inverse-Dash Rectangular Slot 2x4 Array 5.8 GHz Antenna for Multiple Access Integration of IoT Systems and Terrestrial Satellite Communication Networks”, I. Mujahidin, B.B. Subagio, R. Apriantoro, M.N. Mara, S. Hasanah, A. Kitagawa, *International Journal of Integrated Engineering*, Vol. 17, No. 2, August 2025, pp. 344-357. DOI:10.30880/ijie.2025.17.02.028
- 12.476** To WorkNo. 5.38 In: “Characterization of integrated on-chip graphene/Cu inductor for MEMS technology”, M. Derkaoui, M. Sahraoui, L.L. Serjy, *Analog Integrated Circuits and Signal Processing*, August 2025, pp. 344-357. DOI:10.1007/s10470-025-02482-1
- 12.477** To WorkNo. 5.13 In: “Performance Enhancement of a-SiGe:H TFTs via SiO₂/Al₂O₃ Bi-Layer Gate Dielectrics”, D.B. Othmane, *Technical Physics*, August 2025, pp. 1-7. DOI: 110.1134/S1063784225600870
- 12.478** To WorkNo. 5.36 In: “Direct extraction of parasitic source and drain resistances in MOSFETs using saturation current ratio”, J.W. Park, S. Jeong. H. Lee, S.J. Park, J.Y. Im, D.H. Kim, Y.J. Lee, D.M. Kim, S.J. Choi, *Solid State Electronics* 229, 109209, August 2025, pp. 1-7. DOI: 10.1016/j.sse.2025.109209
- 12.479** To WorkNo. 5.36 In: “Experimental Evaluation of Series Resistance in 7-Levels Stacked Nanosheet Transistors”, V. Rodrigues Prates, M.A. Pavanello, M. Cassé, S. Barraud, M. De Souza, *Proceedings of the 39th Symposium on Microelectronics Technology and Devices (SBMicro)*, 25-29 August 2025, Manaus, Brazil, pp. 1-4. DOI: 10.1109/SBMICRO66945.2025.11197753
- 12.480** To WorkNo. 5.47 In: “Inverse-Dash Rectangular Slot 2x4 Array 5.8 GHz Antenna for Multiple Access Integration of IoT Systems and Terrestrial Satellite Communication Networks”, I. Mujahidin, B.B. Subagio, R. Apriantoro, M.N. Mara, S. Hasanah, A. Kitagawa, *International Journal of of Integrated Engineering*, Vol. 17, No. 2, August 2025, pp. 344-357. DOI:10.30880/ijie.2025.17.02.028

- 12.481** To WorkNo. 5.20 In: “Design, Analysis and Characterization of a MAGFET-Based Magnetic Sensor and its Readout Circuit”, R. Farah, Master Thesis, Linköping University, September 2025.
- 12.482** To WorkNo. 5.40 In: “Performance Analysis of Patch Modification Techniques for Microstrip Antennas in 5.8 GHz IoT Applications”, A.I. Kasinamubare, T.M. Mukwewa, International Journal on Science and Technology, Vol. 16, No. 3, September 2025, pp. 1-14. DOI: 10.71097/IJSAT.v16.i3.6867
- 12.483** To WorkNo. 5.36 In: “Reduction of current collapse in NH₃-MBE-grown in situ SiN/AlGa_N/AlN/GaN high electron mobility transistors on a SiC substrate”, V.G. Mansurov, T.V. Malin, D.S. Milakhin, D. D Bashkatov, V.E. Zemlyakov, N.V. Guminov, V.I. Egorkin, Journal of Applied Physics, 138, 125706, September 2025, pp. 1-14. DOI: 10.1063/5.0279167
- 12.484** To WorkNo. 5.17 In: “Experimental Characterization of the MOSFET Fano Factor at Cryogenic Temperatures for Accurate Cryo-CMOS RF Modeling”, S. Das, S. Raman, J.C. Bardin, IEEE Transactions on Microwave Theory and Techniques, Vol. 73, No. 10, October 2025, pp. 7164-7176. DOI: 10.1109/TMTT.2025.3578317
- 12.485** To WorkNo. 5.47 In: “Experimental validation of a dual-band printed antenna array operating at 2.45/5.8 GHz with a high efficiency for wireless power transmission applications”, W. En-Naghma, M. Latch, H. Halaq, A. El-Ougli, International Journal of Electrical and Computer Engineering (IJECE), Vol. 15, No. 5, October 2025, pp. 4662-46670. DOI: 10.11591/ijece.v15i5.pp4662-4670
- 12.486** To WorkNo. 5.49 In: “Insights into the effect of graphene on Cu electrical conductivity: Experimental investigations of Cu foil coated with graphene”, N. Shen, C. Cheng, B. Liu, X. Zhang, X. Liang, Applied Physics Letters, Vol. 127, 171903, October 2025, pp. 1-7. DOI: 10.1063/5.0291229
- 12.487** To WorkNo. 6.089 In: “An Ultrawideband and Miniaturized Vertically Polarized Omnidirectional Sensing Antenna for Internet of Things Applications”, Y. Sang, J. Sun, Y. Cheng, Proceedings of the 2025 IEEE 11th World Forum on Internet of Things (WF-IoT), Chengdu, China, October 27-30, 2025, pp. 1-3. DOI: 110.1109/WF-IoT64238.2025.11270643
- 12.488** To WorkNo. 6.092 In: “A Compact Multi-folded Meandered Antenna for 5G mmWave Systems”, A. Khan, S. Ahmad, M.S. Tong, Proceedings of the 2025 Photonics & Electromagnetics Research Symposium - Fall, Chiba, Japan, November 5-9, 2025, pp. 1-5. DOI: 10.23919/PIERS-Fall62445.2025.11394382

- 12.489** To WorkNo. 5.40 In: “Applications of Active Materials”, Capítulo 2 de libro “Mechanics of Active Materials and Structures”, F. Ebrahi, M.F. Ahari, H. Sepiani, CRC Press, Taylor and Francis Group, Boca Raton, Florida, EUA, ISBN: 978-1-003-54073-1 December 2025, pp. 7-28. DOI: 10.1201/9781003540731-2
- 2026** **12.490** To WorkNo. 5.40 In: “5.8 GHz Microstrip Patch Antennas for Wireless Power Transfer: A Comprehensive Review of Design, Optimization, Applications, and Future Trends”, Y. Albaihani, R. Akram, E.A. Hajlaoui, A.M. Almohaimeed, Z.M. Almohaimeed, A. Albaihani, Electronics, Vol 15, 311, January 2026, pp. 1-41. DOI:10.3390/electronics15020311
- 12.491** To WorkNo. 5.47 In: “5.8 GHz Microstrip Patch Antennas for Wireless Power Transfer: A Comprehensive Review of Design, Optimization, Applications, and Future Trends”, Y. Albaihani, R. Akram, E.A. Hajlaoui, A.M. Almohaimeed, Z.M. Almohaimeed, A. Albaihani, Electronics, Vol 15, 311, January 2026, pp. 1-41. DOI:10.3390/electronics15020311
- 12.492** To WorkNo. 5.43 In: “A high-gain terahertz MIMO antenna design based on broadband near-zero refractive index metamaterials”, Z. Lai, F. Liu, H. Xu, Y. Zhang, B. Li, A. Zhang, Materials Research Express, Vol. 13, No. 3, February 2026, pp. 1-11. DOI: 10.1088/2053-1591/ae3f01
- 12.493** To WorkNo. 5.31 In: “An Improved High-Frequency FinFET Model Capturing the Cryogenic Tunneling Effect”, S. Xiang, Y. Wu, J. Liu, H. Liu, C. Zhao, Y. Yu, G. Gugliandolo, N. Donato, G. Crupi, Y. Xu, K. Kang, IEEE Transactions on Microwave Theory and Techniques, Vol. 74, No. 3, March 2026, pp. 2318-2325. DOI: 10.1109/TMTT.2025.3644367
- 12.494** To WorkNo. 5.28 In: “A 320-GHz Scalable Equivalent-Circuit Model With Dispersive NQS Effect for CMOS Transistors: From Theory to Experimental Validation”, Y. Xu, K. Li, Y. Wu, H. Liu, Y. You, C. Zhao, G. Gugliandolo, N. Donato, G. Crupi, K. Dang, IEEE Transactions on Microwave Theory and Techniques, Vol. 74, No. 3, March 2026, pp. 2326-2334. DOI: 10.1109/TMTT.2025.3645232
- 12.495** To WorkNo. 5.28 In: “Impact of MOSFET source/drain resistance on channel thermal noise calculation and noise performance”, J. Jeong, I. Myeong, I. Song, Results in Physics, 84, 108634, March 2026, pp. 1-9. DOI: 10.1016/j.rinp.2026.108634
- 12.496** To WorkNo. 5.41 In: “Slow-light modulator with shielded traveling wave electrode on a thin-film lithium niobate platform”, Y. Chen, L. Zhou, W. Zhu, C. Guo, H. Niu, R. Liu, J. Wang, Q. Wang, S. She, G. Hu, B. Yup, Optics Express, Vol. 34, No. 6, March 2026, pp. 11139-11155. DOI: 10.1364/OE.588850

- 12.497** A Trabajo No. 5.32 En: “Parasitic Characterization of Hot-Carrier-Induced Degradation using Experimental S-Parameters for RF-MOSFETs”, C. Tanaka, T. Suzuki, A. Sueoka, F. Fujii, K. Matsuzawa, Proceedings of the IEEE 38th International Conference on Microelectronic Test Structures (ICMTS), Matsue, Japan, March 23-26 2026, pp. 1-4. DOI: 10.1109/ICMTS69943.2026.11471704
- 12.498** To Work No. 5.32 In: “Composite-enabled epsilon-near-zero metamaterials and their emerging applications in antennas and microwave engineering”, M. Zhao, Z. Wang, S. Ran, K. Sun, J. Zhang, Y. Yuan, Q. You, C. Song, Y. Liu, R. Fan, Journal of Alloys and Compounds, 1063, Article 187655, March 2026, pp. 1-21. DOI: 10.1016/j.jallcom.2026.187655
- 12.499** To WorkNo. 5.23 In: “Time-Controlled Blue-to-Red Photoluminescence Modulation in Silicon-Rich Oxide Thin Films Deposited by HFCVD Using SBA-15-Based Solid Precursors”, D. Diaz-Tapia, C. Morales-Ruiz, R. Galeazzi-Isasmendi, H. Pérez-Ladrón de Guevara, G. Garcia, R. Portillo, Materials Chemistry and Physics, Vol. 353, April 2026, pp. 1-14. DOI: 10.1016/j.matchemphys.2026.132122
- 12.500** To WorkNo. 5.36 In: “Performance Enhancement of Schottky Barrier MOSFET by Laser-Induced Low Temperature Dopant Segregation for Monolithic-3D Integration”, F. Wang, Y. Zhang, J. Liu, S. Liu, Y. Bro, S. Mao, M. Ding, Z. Zhang, Q. Zhang, H. Yin, IEEE Journal of the Electron Devices Society, Vol. xx, No. X, XXXXXXXX 2025, pp. 1-7. DOI: 10.1109/JEDS.2025.3602898
- 12.501** To WorkNo. 5.22 In: “Frequency Domain Modeling of Interconnects Based on Assemble Neural Network for 3D Integration”, Z-X Ye, D-W. Wang, W-S Zhao, X. Lin, N. Zhu, M. Tang, J. Liu, L. Sun, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, Vol. xx, No. X, XXXXXXXX 2025, pp. 1-14. DOI: 10.1109/TCAD.2025.3614103

13.- TAUGHT COURSES

a) Undergraduate level courses:

1987	13.1.1	“Basic Algebra” Universidad de las Américas, Cholula, Puebla, México August-December 1987
	13.1.2	“Physics I” Universidad de las Américas, Cholula, Puebla, México August-December 1987
1988	13.1.3	“Electromagnetic Theory I” Universidad de las Américas, Cholula, Puebla, México January-May 1988
1989	13.1.4	“Electromagnetic Theory I” Universidad de las Américas, Cholula, Puebla, México August-December 1989
1990	13.1.5	“Electromagnetic Theory I” Universidad de las Américas, Cholula, Puebla, México January-May 1990
1991	13.1.6	“Electromagnetic Theory I” Universidad de las Américas, Cholula, Puebla, México January-May 1991
	13.1.7	“Electromagnetic Theory I” Universidad de las Américas, Cholula, Puebla, México August-December 1991
1997	13.1.8	“Electromagnetic Theory” Universidad de las Américas, Cholula, Puebla, México January-May 1997
	13.1.9	“Electronics II” Universidad de las Américas, Cholula, Puebla, México January-May 1997
	13.1.10	“Electromagnetic Theory” Universidad de las Américas, Cholula, Puebla, México August-December 1997
	13.1.11	“Antennas” Universidad de las Américas, Cholula, Puebla, México August-December 1997

- 1998** **13.1.12** “Electromagnetic Theory”
Universidad de las Américas, Cholula, Puebla, México
January-May 1998
- 13.1.13** “Antennas”
Universidad de las Américas, Cholula, Puebla, México
January-May 1998
- 13.1.14** “Electromagnetic Theory”
Universidad de las Américas, Cholula, Puebla, México
August-December 1998
- 13.1.15** “Antennas”
Universidad de las Américas, Cholula, Puebla, México
August-December 1998
- 1999** **13.1.16** “Antennas”
Universidad de las Américas, Cholula, Puebla, México
January-May 1999
- 13.1.17** “Antennas”
Universidad de las Américas, Cholula, Puebla, México
August-December 1999
- 2000** **13.1.18** “Antennas”
Universidad de las Américas, Cholula, Puebla
January-May 2000
- 13.1.19** “Electromagnetic Theory”
Universidad de las Américas, Cholula, Puebla
January-May 2000
- 13.1.20** “Electromagnetic Theory”
Universidad de las Américas, Cholula, Puebla
May-June 2000
- 13.1.21** “Antennas”
Universidad de las Américas, Cholula, Puebla
August-December 2000
- 13.1.22** “Electromagnetic Theory”
Universidad de las Américas, Cholula, Puebla
August-December 2000
- 2001** **13.1.23** “Antennas”
Universidad de las Américas, Cholula, Puebla
January-May 2001

- 13.1.24** “Electromagnetic Theory”
Universidad de las Américas, Cholula, Puebla
January-May 2001
- 13.1.25** “Antennas”
Universidad de las Américas, Cholula, Puebla
August-December 2001
- 2002** **13.1.26** “Antennas”
Universidad de las Américas, Cholula, Puebla
January-May 2002
- 13.1.27** “Antennas”
Universidad de las Américas, Cholula, Puebla
August-December 2002
- 2003** **13.1.28** “Antennas”
Universidad de las Américas, Cholula, Puebla
January-May 2003
- 13.1.29** “Antennas”
Universidad de las Américas, Cholula, Puebla
August-December 2003
- 2004** **13.1.30** “Antennas”
Universidad de las Américas, Cholula, Puebla
January-May 2004.
- 13.1.31** “Transmission Lines and Antennas”
Universidad de las Américas, Cholula, Puebla
August-December 2004.
- 2005** **13.1.32** “Transmission Lines and Antennas”
Universidad de las Américas, Cholula, Puebla
January-May 2005.
- 13.1.33** “Transmission Lines and Antennas”
Universidad de las Américas, Cholula, Puebla
August-December 2005.
- 2006** **13.1.34** “Transmission Lines and Antennas”
Universidad de las Américas, Cholula, Puebla
January-May 2006.
- 13.1.35** “Transmission Lines and Antennas”
Universidad de las Américas, Cholula, Puebla
August-December 2006.

- 2007**
- 13.1.36** “Transmission Lines and Antennas”
Universidad de las Américas, Cholula, Puebla
January-May 2007.
 - 13.1.37** “Transmission Lines and Antennas”
Universidad de las Américas, Cholula, Puebla
August-December 2007.

- b) Graduate level courses:**
- 1989**
- 13.2.1** “Semiconductor Devices”
INAOE, Tonantzintla, Puebla, México
January-May 1989
 - 13.2.2** “Electromagnetic Theory”
INAOE, Tonantzintla, Puebla, México
May-July 1989
 - 13.2.3** “Modeling of Semiconductor Devices and Integrated Circuits”
INAOE, Tonantzintla, Puebla, México
May-August 1989
 - 13.2.4** “Characterization and Optimization of ICs”
INAOE, Tonantzintla, Puebla, México
August-December 1989
(Taught jointly with Mónico Linares)
 - 13.2.5** “Physical Electronics”
INAOE, Tonantzintla, Puebla, México
August-December 1989
- 1990**
- 13.2.6** “Solid State Physics”
INAOE, Tonantzintla, Puebla, México
January-May 1990
 - 13.2.7** “Electromagnetic Theory”
INAOE, Tonantzintla, Puebla, México
May-July 1990
- 1991**
- 13.2.8** “Electromagnetics”
INAOE, Tonantzintla, Puebla, México
January-May 1991
 - 13.2.9** “Electromagnetic Theory”
INAOE, Tonantzintla, Puebla, México
May-July 1991
 - 13.2.10** “Electronic Devices”
INAOE, Tonantzintla, Puebla
August-December 1991
- 1992**
- 13.2.11** “Physics of Semiconductor Devices”
INAOE, Tonantzintla, Puebla, México
January-May 1992

- 13.2.12** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla, México
 May-July 1992
- 13.2.13** “Electronic Devices”
 INAOE, Tonantzintla, Puebla, México
 August-December 1992
- 1993** **13.2.14** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla, México
 June-August 1993
- 1994** **13.2.15** “Physics”
 INAOE, Tonantzintla, Puebla, México
 June-August 1994
- 1996** **13.2.16** “Physics of Semiconductor Devices”
 INAOE, Tonantzintla, Puebla, México
 January-May 1996
- 13.2.17** “Physics”
 INAOE, Tonantzintla, Puebla, México
 June-August 1996
- 1997** **13.2.18** “Physics”
 INAOE, Tonantzintla, Puebla, México
 June-August 1997
- 13.2.19** “Modeling of Semiconductor Devices”
 INAOE, Tonantzintla, Puebla, México
 August-December 1997
 (Taught jointly with E. Gutiérrez and A. Torres)
- 1998** **13.2.20** “Physics of Semiconductor Devices”
 INAOE, Tonantzintla, Puebla, México
 January-May 1998
- 13.2.21** “Physics”
 INAOE, Tonantzintla, Puebla, México
 June-August 1998
- 13.2.22** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla, México
 August-December 1998
- 13.2.23** “Physics and Modeling of the MOS Transistor”
 INAOE, Tonantzintla, Puebla, México
 August-December 1998

1999	13.2.24	“Physics of Semiconductor Devices” INAOE, Tonantzintla, Puebla, México January-May 1999
	13.2.25	“Physics and Modeling of the MOS Transistor” INAOE, Tonantzintla, Puebla, México January-May 1999
	13.2.26	“Physics” INAOE, Tonantzintla, Puebla, México June-August 1999
	13.2.27	“Physics and Modeling of the MOS Transistor” INAOE, Tonantzintla, Puebla, México August-December 1999
2000	13.2.28	“Electromagnetic Theory” INAOE, Tonantzintla, Puebla June-August 2000
	13.2.29	“Physics and Modeling of the MOS Transistor” INAOE, Tonantzintla, Puebla August-December 2000
	13.2.30	“Physics and Modeling of Semiconductor Devices” INAOE, Tonantzintla, Puebla, México August-December 2000
2001	13.2.31	“Physics of Semiconductor Devices” INAOE, Tonantzintla, Puebla, México January-May 2001
	13.2.32	“Electromagnetic Theory” INAOE, Tonantzintla, Puebla June-August 2001
	13.2.33	“Physics and Modeling of the MOS Transistor” INAOE, Tonantzintla, Puebla August-December 2001
2002	13.2.34	“Physics of Semiconductor Devices” INAOE, Tonantzintla, Puebla, México January-May 2002
	13.2.35	“Electromagnetic Theory” INAOE, Tonantzintla, Puebla June-August 2002

- 13.2.36** “Modeling and Simulation of Semiconductor Devices and Integrated Circuits”
 INAOE, Tonantzintla, Puebla
 June-August 2002.
 (Taught jointly with Alfonso Torres)
- 13.2.37** “General Physics”
 INAOE, Tonantzintla, Puebla
 August-December 2002
- 2003** **13.2.38** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 June-August 2003
- 13.2.39** “Electronic Devices”
 INAOE, Tonantzintla, Puebla
 August-December 2003
- 2004** **13.2.40** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 June-July 2004
- 2005** **13.2.41** “High Frequency Measurements, Characterization and Modeling of Devices”
 INAOE, Tonantzintla, Puebla
 January-May 2005.
 (Taught jointly with Reydezel Torres)
- 13.2.42** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 June-July 2005.
 (Taught jointly with Reydezel Torres)
- 13.2.43** “Physics and Modeling of the MOS Transistor”
 INAOE, Tonantzintla, Puebla
 August-December 2005.
- 2006** **13.2.44** “High Frequency Measurements, Characterization and Modeling of Devices”
 INAOE, Tonantzintla, Puebla
 January-May 2006.
- 13.2.45** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 June-July 2006.

- 13.2.46** “Mathematical Methods”
 INAOE, Tonantzintla, Puebla
 June-July 2006.
 (Taught jointly with Francisco Soto, July César Ramírez and Jorge Pedraza)
- 13.2.47** “Physics and Modeling of Transistors”
 INAOE, Tonantzintla, Puebla
 August-December 2006.
 (Taught jointly with Pedro Rosales)
- 2007** **13.2.48** “High Frequency Measurements, Characterization and Modeling of Devices”
 INAOE, Tonantzintla, Puebla
 January-May 2007.
 (Taught jointly with Reydezel Torres)
- 13.2.49** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 May-July 2007.
 (Taught jointly with Reydezel Torres)
- 13.2.50** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2007.
 (Taught jointly with Reydezel Torres)
- 2008** **13.2.51** “High Frequency Measurements, Characterization and Modeling of Devices”
 INAOE, Tonantzintla, Puebla
 January-May 2008.
 (Taught jointly with Reydezel Torres)
- 13.2.52** “Physics and Modeling of the MOS Transistor”
 INAOE, Tonantzintla, Puebla
 May-July 2008.
- 13.2.53** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 May-July 2008.
 (Taught jointly with Reydezel Torres)
- 13.2.54** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2008.
 (Taught jointly with Reydezel Torres)

- 2009**
- 13.2.55** “High Frequency Measurements, Characterization and Modeling of Devices”
 INAOE, Tonantzintla, Puebla
 January-May 2009.
 (Taught jointly with Reydezel Torres)
- 13.2.56** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 May-July 2009.
 (Taught jointly with Reydezel Torres)
- 13.2.57** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2009.
 (Taught jointly with Reydezel Torres)
- 2010**
- 13.2.58** “High Frequency Measurements, Characterization and Modeling of Devices”
 INAOE, Tonantzintla, Puebla
 January-April 2010.
 (Taught jointly with Reydezel Torres)
- 13.2.59** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 May-July 2010.
 (Taught jointly with Reydezel Torres)
- 13.2.60** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2010.
 (Taught jointly with Reydezel Torres)
- 2011**
- 13.2.61** “High Frequency Measurements, Characterization and Modeling of Devices”
 INAOE, Tonantzintla, Puebla
 January-April 2011.
 (Taught jointly with Reydezel Torres)
- 13.2.62** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 May-July 2011.
 (Taught jointly with Reydezel Torres)

- 13.2.63** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2011.
 (Taught jointly with Reydezel Torres)
- 13.2.64** “Advanced Electrodynamics for the Microwave Regime”
 INAOE, Tonantzintla, Puebla
 August-December 2011.
- 2012** **13.2.65** “High Frequency Measurements, Characterization and Modeling of
 Devices”
 INAOE, Tonantzintla, Puebla
 January-April 2012.
 (Taught jointly with Reydezel Torres)
- 13.2.66** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 May-July 2012.
 (Taught jointly with Reydezel Torres)
- 13.2.67** “Microwave Devices”
 INAOE, Tonantzintla, Puebla
 May-July 2012.
- 13.2.68** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2012.
 (Taught jointly with Reydezel Torres)
- 2013** **13.2.69** “High Frequency Measurements, Characterization and Modeling of
 Devices”
 INAOE, Tonantzintla, Puebla
 January-May 2013.
- 13.2.70** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 May-June 2013.
 (Taught jointly with Reydezel Torres)
- 13.2.71** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2013.
 (Taught jointly with Reydezel Torres)
- 13.2.72** “Microwave Devices”
 INAOE, Tonantzintla, Puebla
 August-December 2012.

- 2014** **13.2.73** “High Frequency Measurements, Characterization and Modeling of Devices”
 INAOE, Tonantzintla, Puebla
 January-May 2014.
- 13.2.74** “High Frequency Measurements, Characterization and Modeling of Devices”
 INAOE, Tonantzintla, Puebla
 May-July 2014.
- 13.2.75** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2014.
 (Taught jointly with Reydezel Torres and Peter Halevi)
- 2015** **13.2.76** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2015.
 (Taught jointly with Reydezel Torres and Peter Halevi)
- 13.2.77** “Antennas”
 INAOE, Tonantzintla, Puebla
 August-December 2015.
- 2016** **13.2.78** “Mathematical Methods”
 INAOE, Tonantzintla, Puebla
 May-July 2016.
 (Taught jointly with Reydezel Torres and Rogerio Enríquez)
- 13.2.79** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2016.
 (Taught jointly with Reydezel Torres and Peter Halevi)
- 13.2.80** “Physics”
 INAOE, Tonantzintla, Puebla
 August-December 2016.
- 2017** **13.2.81** “Transmission Lines, Waveguides and Antennas”
 INAOE, Tonantzintla, Puebla
 January-May 2017.
- 13.2.82** “Mathematical Methods”
 INAOE, Tonantzintla, Puebla
 May-July 2017.
 (Taught jointly with Reydezel Torres)

- 13.2.83** “Physics”
 INAOE, Tonantzintla, Puebla
 August-December 2017.
- 2018** **13.2.84** “Transmission Lines, Waveguides and Antennas”
 INAOE, Tonantzintla, Puebla
 January-May 2018.
- 13.2.85** “Mathematical Methods”
 INAOE, Tonantzintla, Puebla
 May-July 2018.
 (Taught jointly with Luis Hernández)
- 13.2.86** “High Frequency Measurements, Characterization and Modeling of
 Devices”
 INAOE, Tonantzintla, Puebla
 May-July 2018.
- 2019** **13.2.87** “High Frequency Measurements, Characterization and Modeling of
 Devices”
 INAOE, Tonantzintla, Puebla
 January-May 2019.
- 13.2.88** “Mathematical Methods”
 INAOE, Tonantzintla, Puebla
 May-July 2018.
 (Taught jointly with Reydezel Torres)
- 13.2.89** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2019.
 (Taught jointly with Reydezel Torres)
- 13.2.90** “Physics”
 INAOE, Tonantzintla, Puebla
 August-December 2019.
- 2020** **13.2.91** “Transmission Lines, Waveguides and Antennas”
 INAOE, Tonantzintla, Puebla
 January-May 2020.
- 13.2.92** “Research Seminar”
 INAOE, Tonantzintla, Puebla
 May-July 2020.

- 13.2.93** “Mathematical Methods”
 INAOE, Tonantzintla, Puebla
 May-July 2020.
 (Taught jointly with Luis Hernández)
- 13.2.94** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2020.
 (Taught jointly with Peter Halevi)
- 2021** **13.2.95** “Transmission Lines, Waveguides and Antennas”
 INAOE, Tonantzintla, Puebla
 January-May 2021.
- 13.2.96** “Mathematical Methods”
 INAOE, Tonantzintla, Puebla
 May-July 2021.
 (Taught jointly with Reydezel Torres)
- 2022** **13.2.97** “Transmission Lines, Waveguides and Antennas”
 INAOE, Tonantzintla, Puebla
 January-May 2022.
- 13.2.98** “Mathematical Methods”
 INAOE, Tonantzintla, Puebla
 May-July 2022.
 (Taught jointly with Reydezel Torres)
- 13.2.99** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2022.
 (Taught jointly with Reydezel Torres)
- 2023** **13.2.100** “Transmission Lines, Waveguides and Antennas”
 INAOE, Tonantzintla, Puebla
 January-May 2023.
- 13.2.101** “Mathematical Methods”
 INAOE, Tonantzintla, Puebla
 May-July 2023.
 (Taught jointly with Luis Hernández)
- 13.2.102** “Electromagnetic Theory”
 INAOE, Tonantzintla, Puebla
 August-December 2023.
 (Taught jointly with Reydezel Torres)

	13.2.103	“Modeling and Simulation” INAOE, Tonantzintla, Puebla August-December 2023.
2024	13.2.104	“Mathematics” INAOE, Tonantzintla, Puebla May-June 2024. (Taught jointly with Rogerio Enríquez)
	13.2.105	“Electromagnetic Theory” INAOE, Tonantzintla, Puebla August-December 2024. (Taught jointly with Reydezel Torres)
	13.2.106	“Physics” INAOE, Tonantzintla, Puebla August-December 2024.
2025	13.2.107	“Transmission Lines, Waveguides and Antennas” INAOE, Tonantzintla, Puebla January-May 2025.
	13.2.108	“Mathematics” INAOE, Tonantzintla, Puebla May-July 2025. (Taught jointly with Rogerio Enríquez)
	13.2.109	“Metamaterials and Metasurfaces” INAOE, Tonantzintla, Puebla May-July 2025.
	13.2.110	“Electromagnetic Theory” INAOE, Tonantzintla, Puebla August-December 2025. (Taught jointly with Reydezel Torres)
2026	13.2.111	“Transmission Lines, Waveguides and Antennas” INAOE, Tonantzintla, Puebla January-May 2026.

14.- DIRECTED THESES

Doctoral:

- 2000** **14.1.1** “Análisis, Modelado y Diseño de una Estructura Split-Drain MAGFET bajo Condiciones de Operación a 77 y 300K” (*Analysis, Modeling and Design of a Split Drain MAGFET Operating at 77 and 300K*), Pedro J. García Ramírez, INAOE, August 24, 2000.
(Directed jointly with Edmundo Gutiérrez)
- 2003** **14.1.2** “Small Signal Modeling of Bulk MOSFETs for High Frequency Applications”, Reydezel Torres Torres, INAOE, December 15 2003.
- 2004** **14.1.3** “Transistor Bipolar de Heterounión con Emisor Amorfo Compatible con Tecnología CMOS” (*Heterojunction Bipolar Transistor with Amorphous Emitter Compatible with CMOS Technology*), Pedro Rosales Quintero. INAOE, November 15 2004.
(Directed jointly with Alfonso Torres).
- 2008** **14.1.4** “Modelado de la Inductancia Propia para Interconexiones en Silicio” (*Modeling of Self Inductance for Interconnects on Silicon*), Jesús Huerta Chua, INAOE, December 19 2008.
- 2010** **14.1.5** “Modeling and Design of Split-Drain MAGFETs and Possible Applications in Integrated Circuit Test”, Gerard Franz Santillán Quiñonez. INAOE, July 15, 2010.
(Directed jointly with Víctor Champac).
- 2011** **14.1.6** “Reconfigurable Microwave Circuits”, Georgina Guadalupe Rosas Guevara. INAOE, July 14, 2011.
(Directed jointly with Wilfrido Moreno).
- 2013** **14.1.7** “Development of Methodologies for Characterization and Modeling of Devices for High Frequency Applications From Small-Signal S-Parameters”, Germán Andrés Álvarez Botero. INAOE, August 16, 2013.
(Directed jointly with Reydezel Torres).
- 2016** **14.1.8** “Antennas for Millimeter-Wave Applications”, Luz Karine Sandoval Granados. INAOE, June 27, 2016.
- 14.1.9** “Study of the MOS Transistor for Applications in RF Circuits”, Fabián Zárate Rincón. INAOE, August 26, 2016.
(Directed jointly with Reydezel Torres).

- 2019** **14.1.10** “Study and Development of Radiolinks in K Band: Potential Applications in Atmospheric Attenuation Measurements and Communications”, Luis Alberto Rodríguez Meneses. INAOE, June 27, 2019.
- 2021** **14.1.11** “Modeling of on-chip inductors and coplanar waveguides including effects introduced by the shield used to mitigate the EM coupling with the semiconductor substrate”, José Valdés Rayón. INAOE, August 30 2021. (Directed jointly with Reydezel Torres Torres)
- 2022** **14.1.12** “Physically Based Analyses of Interconnects and Characteristic Impedance in Microwave Printed and Integrated Circuits”, Yojanes Andrés Rodríguez Velásquez. INAOE, December 8, 2022. (Directed jointly with Reydezel Torres Torres)
- 2024** **14.1.13** “Antennas for microwave and millimeter-wave applications”, Karen Nallely Olan Nuñez. INAOE, January 24, 2024.

Master’s:

- 1990** **14.2.1** “Determinación de Funcionalidad de Circuitos Integrados Digitales CMOS” (*Determination of the Functionality of Digital CMOS Integrated Circuits*), Sotero Fuentes, INAOE, October 15 1990. (Directed jointly with Mónico Linares A.)
- 1991** **14.2.2** “Diseño de un Otófono en Base a Celdas Básicas Analógicas CMOS” (*Design of a Hearing Aid with Basic Analog Cells*), Federico Sandoval, INAOE, May 23 1991.
- 2000** **14.2.3** “Método Alternativo para la Determinación de la Longitud Efectiva y la Resistencia Serie Fuente/Drenaje en el TMOS LDD” (*An Alternative Method to Determine Effective Length and Source/Drain Series Resistance in LDD MOS Transistors*), Reydezel Torres, INAOE, August 9 2000.
- 2001** **14.2.4** “Reordenamiento de las Ecuaciones que Emanan de Circuitos no Lineales para Acelerar la Simulación Homotópica” (*Reordering of the Equations Emanating from Non-Linear Circuits to Accelerate Homotopic Simulation*), Héctor Vázquez Leal, INAOE, May 5 2001. (Directed jointly with Arturo Sarmiento R.)
- 14.2.5** “Diseño de un Magnetómetro para Caracterización de Sensores Magnéticos” (*Design of a Magnetometer for the Characterization of Magnetic Sensors*), Edilberto Serrano, INAOE, May 24 2001.
- 2002** **14.2.6** “Fabricación y Caracterización de Inductores Coplanares Integrados” (*Fabrication and Characterization of Coplanar Integrated*)

- Integrated Inductors*), Jesús Huerta Chua, INAOE, February 22 2002.
(Directed jointly with Alejandro Díaz Sánchez, Alfonso Torres Jacome).
- 2003** **14.2.7** “Modelado de Componentes Parásitos de Compuerta de un Transistor MOS LDD” (*Modeling of the LDD MOS Transistor’s Parasitic Gate Components*), Lucila Ortega Vargas, INAOE, November 29 2002.
- 2003** **14.2.8** “Diseño, Fabricación y Caracterización de Antenas Integradas” (*Design, Fabrication and Characterization of Integrated Antennas*), Georgina Rosas Guevara, INAOE, September 1 2003.
- 2003** **14.2.9** “Modelado de la Interferencia Electromagnética en Líneas de Interconexión” (*Modeling of Electromagnetic Interference in Interconnect Lines*), Emmanuel Torres Rios, INAOE, October 24 2003.
- 2005** **14.2.10** “Dos Filosofías Distintas de la Técnica de Calibración LRL Multilíneas para Eliminar los Errores Sistemáticos del Analizador de Redes Vectorial” (*Two Different Philosophies of the LRL Calibration Technique to Eliminate the Systematic Errors in a Vector Network Analyzer*), Juan Alberto Saldivar Morales, INAOE, July 8 2005.
(Directed jointly with Ignacio Zaldívar, Apolinar Reynoso).
- 2009** **14.2.11** “Modelado y Caracterización de MOSFETs Nanométricos Utilizando Técnicas de Circuito Equivalente” (*Characterization and Modeling of Nanometric MOSFETs using Equivalent Circuit Techniques*), Germán Andrés Álvarez Botero, INAOE, June 29 2009.
(Directed jointly with Reydezel Torres).
- 2011** **14.2.12** “Diseño de un Sensor de Potencia para RF” (*Design of a Power Sensor for RF*), Oscar Addiel Seseña Osorio, INAOE, July 15 2011.
- 2012** **14.2.13** “Caracterización de MOSFETs de Microondas Considerando Variaciones en el Voltaje de Substrato” (*Microwave MOSFET Characterization Considering Bulk Voltage Variations*), Fabián Zárate Rincón, INAOE, July 18, 2012.
(Directed jointly with Reydezel Torres).
- 2016** **14.2.14** “Evaluación de Modelos y Metodologías para Caracterizar el TMOS en Altas Frecuencias” (*Assessment of Models and Methodologies to Characterize the MOST in High-Frequencies*), Fabio Alejandro Ruiz Molina, INAOE, February 19, 2016.

- 14.2.15** “Modelado, Medición y Caracterización de Inductores Integrados” (*Modeling, Measurement and Characterization of Integrated Inductors*), José Valdés Rayón, INAOE, February 26, 2016. (Directed jointly with Reydezel Torres).
- 2018** **14.2.16** “Arreglo de Antenas de Microtira para Aplicaciones Satelitales” (*Microstrip Antenna Array for Satellite Applications*) , Brian Julián Sánchez Ruiz, INAOE, October 4, 2018.
- 2019** **14.2.17** “Design, Modeling and Characterization of Antenna Arrays for Internet of Things Applications”, Karen Nallely Olán Núñez, INAOE, August 15, 2019.
- 14.2.18** “An Energy Harvesting Antenna Array for the 28 GHz Band”, Hidai Arnulfo Cárdenas Herrera, INAOE, December 13, 2019.
- 2020** **14.2.19** “A Study of the use of Orbital Angular Momentum in Electromagnetic Waves for High Frequency Communications”, Antonia Carrasco Martínez, INAOE, December 10, 2020.
- 2023** **14.2.20** “A Reconfigurable Antenna with Applications around the 28 GHz Band”, Vicente Alejandro Esquina García, INAOE, April 28, 2023.
- 14.2.21** “Design and optimization of flexible 28 GHz antennas for 5G applications”, Aurea Patricia Medrano Montalvo, INAOE, December 11, 2023.
- 2024** **14.2.22** “Design of an Antenna for IoT Applications in Smart Homes”, Pedro Gonzalo Pérez Méndez, INAOE, August 9, 2024.
- 2025** **14.2.23** “Design of a rectifying antenna (rectenna) for energy harvesting at 60 GHz”, Adrián Quintero González, INAOE, November 19 2025.

Bachelor’s:

- 1992** **14.3.1** “Fabricación y Caracterización de Celdas Básicas Digitales Integradas Metal-Oxido-Semiconductor Complementario (CMOS)” (*Fabrication and Characterization of Integrated Complementary Metal-Oxide-Semiconductor (CMOS) Basic Digital Cells*), Ignacio Záldivar, UAP, 1992. (Directed jointly with Mónico Linares, Arturo Prieto).
- 2002** **14.3.2** “E-Magnetic 3D”, Carlos Marín, UDLA, January 15 2002. (Directed jointly with David Báez López).

2022

14.3.3

“Design and Implementation of a Test System for the Electric, Telemetry, and Command Subsystems for a Pico-satellite”, Adrián Quintero González, Universidad Politécnica del Estado de Morelos, enero 7 2022. (Co-director: Miguel Ángel Velasco Castillo).

15.- EXTERNAL PROJECTS

- 1989-90** **15.1** “Fortalecimiento al Postgrado en Microelectrónica en el INAOE” (*The Strengthening of Graduate Studies in Microelectronics in the INAOE*), project funded by the Council of National Technological Education (COSNET), code 183.89, directed jointly with Mónico Linares.
- 1998-99** **15.2** “Caracterización de Transistores MOS para Aplicaciones en Alta Frecuencia” (*Characterization of MOS Transistors for High-Frequency Applications*), project funded by the National Council for Science and Technology (CONACyT), code 211290-5-126894A.
- 2000-01** **15.3** “Characterization and Modeling of High-Frequency MOS Transistors”, Joint project with the “Interuniversitair Micro-Elektronica Centrum” (IMEC), Heverlee, Belgium.
- 2001-03** **15.4** “Caracterización de Componentes Parásitas y Modelado del Transistor MOS usando Técnicas de Alta Frecuencia” (*Characterization of Parasitic Components and Modeling of the MOS Transistor Using High-Frequency Techniques*), project funded by CONACyT, México, under grant No. 33810-A.
- 2002-04** **15.5** “LABDILEIT: Laboratory for Distance Learning based on Internet Technology”, Project sponsored by the Alfa-2 Program of the European Community.
- 2009-12** **15.6** “Caracterización en Altas Frecuencias de Componentes para Circuitos Integrados CMOS/MEMS” (*High Frequency Characterization of Components for CMOS/MEMs Integrated Circuits*), project funded by the National Council for Science and Technology (CONACyT), code 83774-Y.
- 2018-21** **15.7** “Física, Modelado y Caracterización de Dispositivos y Circuitos para Comunicaciones Inalámbricas” (*Physics, Modeling and Characterization of Devices and Circuits for Wireless Communications*), project funded by the National Council for Science and Technology (CONACyT), code 285199.

16.- CONTINUING EDUCATION COURSES

- | | | |
|-------------|-------------|--|
| 1992 | 16.1 | “Didáctica para Estudios de Postgrado” (<i>Didactics for Graduate Studies</i>), INAOE, Tonantzintla, Puebla, México, March-April 1992 (20 hours). |
| | 16.2 | “Hybrid and Multi-Chip Module Design”, Hughes Aircraft, California, USA, December 1992 (40 hours). |
| 1995 | 16.3 | “Hacia una Definición de las Aplicaciones para Circuitos de Alta Frecuencia: Silicio y Compuestos III-V” (<i>Towards a Definition of the Applications of High Frequency Circuits: Silicon and III-V Compounds</i>), INAOE, Tonantzintla, Puebla, México, December 1995 (20 hours). |
| 1996 | 16.4 | “Model 360B Network Analyzer User Training Course”, INAOE, Tonantzintla, Puebla, México, July 1996 (20 hours). |
| 1999 | 16.5 | “RF IC Design for Wireless Communication Systems”, Swiss Federal Institute of Technology, Lausanne, Switzerland, June-July 1999 (30 hours). |
| 2009 | 16.6 | “MEMS SUMMIT V Technology”, Sandia National Laboratories, Albuquerque, New Mexico, USA, December 2009 (20 hours). |
| 2016 | 16.7 | “Fundamentals of Spectrum Analysis”; “Fundamentals of Power Measurements”; “Fundamentals of Vector Network Analysis”; “Calibration in Vector Network Analysis”, Rohde & Schwarz, London, England, October 2016 (6 hours). |

17.- MEMBERSHIPS

- 1992-to date** Member of the IEEE since May 1992 (No. 3107919).
Senior Member since February 16, 2002
- 2002-to-2018** Member of the Mexican National System of Researchers (SNI),
Level I, July 2002 to December 2018.
- 2004-2019** Member of the Board of Directors of the Iberoamerican Science
and Technology Education Consortium (ISTEC), January 2004 to
May 2019.
- 2004-2008** Treasurer of the Consejo Mexicano de Estudios de Posgrado, A.C.
(COMEPO) (*Mexican Council for Graduate Studies*), January 2004
to May 2008.
- 2004-to-date** Member of the Mexican Academy of Sciences, December 2004 to
date.
- 2007-2014** Member and Chairman of the Board of Directors of the
Iberoamerican Science and Technology Education Consortium
(ISTEC), July 2007 to February 2014.
- 2008-2009** Vicepresident of the “Consejo Mexicano de Estudios de Posgrado,
A.C. (COMEPO)” (*Mexican Council for Graduate Studies*), May
2008 to October 2009.
- 2009-2010** President of the “Consejo Mexicano de Estudios de Posgrado,
A.C. (COMEPO)” (*Mexican Council for Graduate Studies*), October
2009 to October 2010.
- 2014-2019** President of the Iberoamerican Science and Technology Education
Consortium (ISTEC), February 2014 to May 2019.
- 2016-to-date** Member of the European Microwave Association, October 2016 to
date.
- 2019-to-date** Member of the Mexican National System of Researchers (SNI),
Level 2, January 2019 to date.

18.- PARTICIPATION IN CONFERENCE ORGANIZING COMMITTEES

- 1999** **Publicity Chair** for the *Third IEEE International Workshop on Design of Mixed-Mode Circuits and Applications*, Puerto Vallarta, Jalisco, México, July 26-28 1999.
- 2000** **Local Arrangements Chair** for the *Third IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDACS2000)*, Cancún, Quintana Roo, México, March 15-17 2000.
- 2001** **Local Arrangements Chair** for the *Second IEEE Latin American Test Workshop*, Cancún, Quintana Roo, México, February 11-14 2001.
- 2001** **General Chair** for the *Second Research Encounter*, Tonantzintla, Puebla, México, November 14-15 2001.
- 2002** **Member of the International Committee** for the *Fourth IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDACS2002)*, Aruba, Netherland Antilles, April 17-19 2002.
- General Chair** for the *First Mesoamerican and Caribbean Workshop on Digital Libraries and Distance Education*, Tonantzintla, Puebla, México, May 15-17 2002.
- General Chair** for the *Third Research Encounter*, Tonantzintla, Puebla, México, November 14-15 2002.
- General Chair** for the *IEEE Latin American CAS Tour 2002*, Tonantzintla, Puebla, México, November 18-22 2002.
- 2003** **Co-Chair of the Technical Program** for the *XIII International Conference on Electronics, Communications and Computers (CONIELECOMP 2003)*, Cholula, Puebla, México, February 24-26 2003.
- General Chair** for the *International Conference on Devices, Circuits and Systems Veracruz 2003*, Boca del Río, Veracruz, México, June 25-27 2003.
- General Chair** for the *Fourth Research Encounter*, Tonantzintla, Puebla, México, November 13-14 2003.
- 2004** **Finance Chair** for the *XVIII National Conference on Graduate Studies*, Culiacán, Sinaloa, México, October 17-19 2004.

National Chair of the Graduate Studies Exposition during the *XVIII National Conference on Graduate Studies*, Culiacán, Sinaloa, México, October 17-19 2004.

Co-General Chair for the *IV Iberoamerican Conference on Sensors (IBERSENSOR 2004)*, Puebla, Puebla, México, October 27-29 2004.

Member of the Technical Program Committee for the *Fifth IEEE International Caracas Conference on Devices, Circuits and Systems (ICCDCS2004)*, Punta Cana, Dominican Republic, November 3-5 2004.

General Chair of the *Fifth Research Encounter*, Tonantzintla, Puebla, México, November 8-9 2004.

General Chair for the *IEEE Latin American CAS Tour 2004*, Boca del Río, Veracruz, México, November 17-19 2004.

2005

Member of the Technical Program Committee for the *XI International Iberchip Workshop (IWS-2005)*, Salvador de Bahía, Brasil, March 28-30, 2005.

Finance Chair for the *XIX National Conference on Graduate Studies*, Puebla, Puebla, México, September 19-21, 2005.

General Chair for the *Sixth Research Encounter*, Tonantzintla, Puebla, México, October 27-28 2005.

2006

Member of the Technical Program Committee for the *XII International Iberchip Workshop (IWS-2006)*, San José, Costa Rica, March 22-24, 2006.

General Chair for the *Sixth IEEE International Caribbean Conference on Devices, Circuits and Systems (ICCDCS2006)*, Playa del Carmen, Quintana Roo, México, April 26-28 2006.

Finance Chair for the *XX National Conference on Graduate Studies*, México, D.F., México, October 16-17 2006.

National Chair of the *Graduate Studies Exposition* during the *XX National Conference on Graduate Studies*, México, D.F., México, October 16-17 2006.

Member of the Technical Program Committee for the *Metrology Symposium 2006*, Querétaro, Querétaro, October 25-27 2006.

Member of the Technical Program Committee of the *36th ASEE/IEEE Frontiers in Education Conference*, San Diego, California, USA, October 28-31 2006.

General Chair for the *Seventh Research Encounter*, Tonantzintla, Puebla, México, November 8 and 9, 2006.

2007

Member of the Technical Program Committee of the *XIII International Iberchip Workshop (IWS-2007)*, Lima, Perú, March 14-16, 2007.

Member of the Technical Program Committee of the *XVIII European Conference on Circuit Theory and Design (ECCTD 2007)*, Sevilla, Spain, August 26-30, 2007.

Member of the Technical Program Committee of the *37th ASEE/IEEE Frontiers in Education Conference*, Milwaukee, Wisconsin, USA, October 10-13 2007.

General Chair of the *Eight Research Encounter*, Tonantzintla, Puebla, México, November 8 y 9, 2007.

Finance Chair for the *XXI National Conference on Graduate Studies*, Guadalajara, Jalisco, México, November 20-23 2007.

National Chair of the *Graduate Studies Exposition* during the *XXI National Conference on Graduate Studies*, Guadalajara, Jalisco, México, November 20-23, 2007.

Member of the Technical Program Committee of the *XXII Conference on Design of Circuits and Integrated Systems (DCIS 07)*, Sevilla, Spain, November 21-23, 2007.

Local Arrangements Chair for the *Workshop on Frontiers in Electronics (WOFE 2007)*, Cozumel, Quintana Roo, México, December 15-19 2007.

2008

Local Arrangements Chair for the *Ninth IEEE Latin American Test Workshop*, Puebla, Puebla, México, February 18-20 2008.

General Co-Chair for the *XIV International Iberchip Workshop (IWS-2008)*, Puebla, Puebla, México, February 20-22 2008.

Finance and Global Arrangements Chair for the *Seventh IEEE International Caribbean Conference on Devices, Circuits and Systems (ICDCS2008)*, Cancún, Quintana Roo, México, April 28-30 2008.

Member of the Technical Program Committee for the *Metrology Symposium 2008*, Querétaro, Querétaro, México, October 22-24, 2008.

Member of the Technical Program Committee of the *38th ASEE/IEEE Frontiers in Education Conference*, Saratoga Springs, New York, USA, October 22-25 2008.

General Chair for the *XXII National Conference on Graduate Studies*, Mérida, Yucatán, México October 27-29, 2008.

General Chair for the *Ninth Research Encounter*, Tonantzintla, Puebla, México, November 6-7, 2008.

Member of the Technical Program Committee of the *XXIII Conference on Design of Circuits and Integrated Systems (DCIS 08)*, Grenoble, France, November 12-14, 2008.

Local Arrangements Chair for the *Second Dependable Circuit Design Conference, Playa del Carmen, Quintana Roo, México, November 27-28, 2008.*

2009

Member of the Technical Program Committee of the *2009 International Workshop Series on Signal Integrity and High-Speed Interconnects (IMWS2009-R9)*, Guadalajara, Jalisco, México, February 20-21 2009.

Member of the Technical Program Committee of the *XIV International Iberchip Workshop (IWS 2009)*, Buenos Aires, Argentina, March 25-27 2009.

Member of the Technical Program Committee for the *39th ASEE/IEEE Frontiers in Education Conference*, San Antonio, Texas, USA, October 18-21 2009.

General Chair for the *XXIII National Conference on Graduate Studies*, San Luis Potosí, San Luis Potosí, México, October 12-14, 2009.

Technical Program Vice-Chair for the *XVII General Assembly of the Iberoamerican Science and Technology Education Consortium*, Albuquerque, New México, USA, October 26-30, 2009.

General Chair for the *Tenth Research Encounter*, Tonantzintla, Puebla, México, November 5-6, 2009.

Local Arrangements Chair and Finance Chair for the *IEEE Circuits and Systems for Medical and Environmental Applications Workshop (CASME 09)*, Mérida, Yucatán, México, December 14-16, 2009.

2010

Member of the Technical Program Committee for the *XVI International Workshop IBERCHIP (IWS 2010)*, Iguazú, Brazil, February 23-25 2010.

Member of the Technical Program Committee for the *40th ASEE/IEEE Frontiers in Education Conference*, Washington, DC, USA, October 27-30 2010.

General Chair for the *XXIV National Conference on Graduate Studies*, Colima, Colima, México, October 6 to 8, 2010.

General Chair for the *Eleventh Research Encounter*, Tonantzintla, Puebla, México, November 4 and 5, 2010.

Local Arrangements Chair and Finance Chair for the *IEEE Circuits and Systems for Medical and Environmental Applications Workshop (CASME 10)*, Mérida, Yucatán, México, December 13-15, 2010.

2011

Co-Chairman of the Technical Program Committee for the *XVII International IBERCHIP Workshop (IWS 2011)*, Bogotá, Colombia, February 23-25 2011.

Member of the Technical Program Committee for the *41st ASEE/IEEE Frontiers in Education Conference*, Rapid City, SD, USA, October 12-15 2011.

2012

Local Arrangements Chair and Finance Chair for the *IEEE Circuits and Systems for Medical and Environmental Applications Workshop (CASME 12)*, Merida, Yucatan, Mexico, January 9-10, 2012.

General Co-Chair and Treasurer for the *XVIII International Iberchip Workshop (IWS-2012)*, Playa del Carmen, Quintana Roo, Mexico, February 29-March 2, 2012.

Treasurer for the *Third IEEE Latin American Symposium on Circuits and Systems (LASCAS 2012)*, Playa del Carmen, Quintana Roo, Mexico, February 29-March 2, 2012.

Local Arrangements Chair and Treasurer for the *13th IEEE Latin American Test Workshop (LATW 2012)*, Quito, Ecuador, April 10-13, 2012.

General Co-Chair for the *Design and Test Summer School*, Puebla, Puebla, México, October 25 y 26, 2012.

2014

Member of the Technical Program Committee for the *5th Latin American Symposium on Circuits and Systems (LASCAS 2014)*, Santiago, Chile, February 25-28, 2014.

Global Arrangements Chair and Finance Chair for *ISTEC's XX General Assembly*, Tonantzintla, Puebla, Mexico, March 25-28, 2014.

Global Arrangements Chair and Finance Chair for the *IEEE International Caribbean Conference on Devices, Circuits and Systems (ICCDCS 2014)*, Playa del Carmen, Quintana Roo, Mexico, April 2-4, 2014.

Co-Organizer of the Special Session for Latin America during the *IEEE International Microwave Symposium (IMS 2014)*, Tampa, Florida, USA, June 4, 2014.

Global Arrangements Chair and Finance Chair for the *22nd IFIP/IEEE International Conference on Very Large Scale Integration (VLSI-SoC 2014)*, Playa del Carmen, Quintana Roo, México, October 6-8, 2014.

2015

Member of the Technical Program Committee for the *6th Latin American Symposium on Circuits and Systems (LASCAS 2015)*, Montevideo, Uruguay, February 24-27, 2015.

Co-Organizer of the Special Session for Latin America during the *IEEE International Microwave Symposium (IMS 2015)*, Phoenix, Arizona, USA, May 21, 2015.

Local Arrangements Chair for the *11th International School on the Effects of Radiation on Embedded Systems for Space Applications (SERESSA 2015)*, Puebla, México, November 30-4 December, 2015.

2016

Member of the Technical Program Committee for the *7th Latin American Symposium on Circuits and Systems (LASCAS 2016)*, Florianópolis, Brazil, February 28-2 March, 2016.

Co-Organizer of the Special Session "Microwaves in the Americas" during the *European Microwave Conference (46th EuMC)*, London, England, October 6, 2016.

Co-Chair of the Technical Program Committee for the *Latin American Microwave Conference (LAMC 2016)*, Puerto Vallarta, Jalisco, México, December 12-14, 2016.

- 2017** **Member of the Technical Program Committee** for the *8th Latin American Symposium on Circuits and Systems (LASCAS 2017)*, Bariloche, Argentina, February 20-23, 2017.
- General Co-Chair** for the 2017 International Caribbean Conference on Devices, Circuits and Systems (*ICCDCS 2017*), Cozumel, Quintana Roo, México, June 5-7, 2017.
- 2018** **General Co-Chair** for the 2018 Latin American Symposium on Circuits and Systems, Puerto Vallarta, Jalisco, México, February 25-28, 2018.
- 2019** **Member of the Technical Program Committee** for the *10th Latin American Symposium on Circuits and Systems (LASCAS 2019)*, Armenia, Colombia, February 25-27, 2019.
- Publications Chair** for the 2019 Latin American Symposium on Circuits and Systems, Armenia, Colombia, February 25-27, 2019.
- 2021** **Co-General Chair for the 3rd IEEE Mexican Humanitarian Technology Conference (MHTC 2021)**, Puebla, Puebla, México, April 21-22 2021.
- 2021** **General Chair for the 13th Electronics and Advanced Design Seminar**, INAOE, Puebla, México, September 20-22, 2023.
- 2025** **General Chair for the MOS-AK Workshop on Semiconductor Technologies**, INAOE, Puebla, May 14-16, 2025.

17.- VOLUNTEER WORK FOR IEEE

2014-2016	Chair of Puebla's EDS Chapter
2015-to date	EDS Distinguished Lecturer
2019-2023	Chair of Puebla's I&MS Chapter
2022-2023	CASS Ambassador serving Mexico
2025	Vice Chair of Puebla Section
2025-2026	Chair of Puebla's EDS Chapter
2026-2027	Chair of Puebla Section

Abbreviated Résumé



Roberto S. Murphy-Arteaga (IEEE M'92, SM'02) received his B.Sc. degree in Physics from St. John's University, Minnesota, and got his M.Sc. and Ph.D. degrees from the National Institute for Research on Astrophysics, Optics and Electronics (INAOE), in Tonantzintla, Puebla, México. He has taught graduate courses at the INAOE since 1989. He has given over 160 talks at scientific conferences and directed 13 Ph.D. dissertations, 23 M.Sc. and 3 B.Sc. theses. He has published more than 170 articles in scientific journals, conference proceedings and newspapers, and is the author of a text book on Electromagnetic Theory. He is currently a senior researcher with the Microelectronics Laboratory.

Dr. Murphy's research interests are the physics, modeling and characterization of the MOS Transistor and passive components for high frequency applications, especially for CMOS wireless circuits, and antenna design.

He is a Senior Member of IEEE, a Distinguished Lecturer of the Electron Devices Society, a member of the Mexican Academy of Sciences, and a member of the Mexican National System of Researchers (SNII).