
Reporte Global de Citas al Trabajo de Investigación del Dr. José Ernesto Rayas Sánchez

Fecha de actualización: Agosto 8, 2023

Contenido:

1.	Listado de publicaciones citadas	2
1.1.	Artículos publicados en revistas científicas indexadas con riguroso arbitraje internacional	2
1.2.	Artículos publicados en memorias de congresos internacionales con riguroso arbitraje.....	6
1.3.	Capítulos de libros	16
2.	Índices cuantitativos del impacto de la investigación del Dr. Rayas.....	19
3.	Artículos científicos como autor principal más altamente citados	19
4.	Constancia del Prof. J. W. Bandler, de la U. McMaster, Canadá	21
5.	Gráfico de citas por año de las últimas dos décadas (<i>Google Scholar</i>).....	24
6.	Apéndice A: Reporte de <i>Google Scholar</i> sobre los 100 trabajos más citados	25
7.	Apéndice B: Reporte de citas de <i>Web of Science</i> (Citas Tipo A).....	36

1. Listado de publicaciones citadas

1.1. Artículos publicados en revistas científicas indexadas con riguroso arbitraje internacional

- [R36] J. E. Rayas-Sánchez and J. A. Reynoso-Hernández, “An overview on RF and microwave research in Latin America: scanning Latin American research on microwaves,” *IEEE Microwave Magazine*, vol. 24, no. 5, pp. 45-57, May 2023. (p-ISSN: 1527-3342; e-ISSN: 1557-9581; INSPEC: 22930264; published online: 11 April 2023; DOI: 10.1109/MMM.2023.3242559)
<https://ieeexplore.ieee.org/document/10099013>
- [R35] J. W. Bandler and J. E. Rayas-Sánchez, “An early history of optimization technology for automated design of microwave circuits,” *IEEE J. of Microwaves*, vol. 3, no. 1, pp. 319-337, Jan. 2023. (e-ISSN: 2692-8388; INSPEC: 22476835; published online: 22 December 2022; DOI: 10.1109/JMW.2022.3225012)
<https://ieeexplore.ieee.org/document/9997133/>
- [R34] G. P. Gibiino, J. E. Rayas-Sánchez, J. B. King, M. Pirola, R. Khazaka, Q. J. Zhang, D. E. Root, and J. W. Bandler, “TC-2 Design Automation Committee—On the future of RF and microwave design automation—2022,” *IEEE Microwave Magazine*, vol. 23, no. 11, pp. 104-105, Nov. 2022. (p-ISSN: 1527-3342; e-ISSN: 1557-9581; published online: 4 Oct. 2022; DOI: 10.1109/MMM.2022.3196416)
https://www.researchgate.net/publication/364326748_TC-2_Design_Automation_Committee-On_the_future_of_RF_and_microwave_design_automation-2022
- [R33] W. Che, R. Mansour, X. Gong, and J. Rayas-Sánchez, “The MTT-S Education Committee—Promoting education for all—2022,” *IEEE Microwave Magazine*, vol. 23, no. 11, pp. 84-86, Nov. 2022. (p-ISSN: 1527-3342; e-ISSN: 1557-9581; published online: 4 Oct. 2022; DOI: 10.1109/MMM.2022.3195601)
<https://ieeexplore.ieee.org/document/9910212/>
- [R32] A. E. Moreno-Mojica and J. E. Rayas-Sánchez, “Frequency- and time-domain yield optimization of a power delivery network subject to large decoupling capacitor tolerances,” *IEEE Trans. Computer-Aided Design of Integrated Circuits and Systems*, vol. 41, no. 12, pp. 5610-5620, Dec. 2022. (p-ISSN: 0278-0070; e-ISSN: 1937-4151; INSPEC: 22293085; published online: 30 March 2022; DOI: 10.1109/TCAD.2022.3163673)
<https://ieeexplore.ieee.org/document/9745029/>
- [R31] A. Viveros-Wacher, R. Baca-Baylón, F. E. Rangel-Patiño, J. L. Silva-Cortés, E. A. Vega-Ochoa, and J. E. Rayas-Sánchez, “Fast jitter tolerance testing for high-speed serial links in post-silicon validation,” *IEEE Trans. Electromagnetic Compatibility*, vol. 64, no. 2, pp. 516-523, Apr. 2022. (p-ISSN: 0018-9375; e-ISSN: 1558-187X; INSPEC: 21685176; published online: Nov. 15, 2021; DOI: 10.1109/TEM.2021.3122348)
<https://ieeexplore.ieee.org/document/9614333/>
- [R30] J. E. Rayas-Sánchez, S. Koziel, and J. W. Bandler, “Advanced RF and microwave design optimization: a journey and a vision of future trends,” *IEEE J. of Microwaves*, vol. 1, no. 1, pp. 481-493, Jan. 2021. (e-ISSN: 2692-8388; INSPEC: 20369054; published online: 11 Jan. 2021; DOI: 10.1109/JMW.2020.3034263)
<https://ieeexplore.ieee.org/document/9318755/>
- [R29] F. J. Leal-Romo, J. E. Rayas-Sánchez, and J. L. Chávez-Hurtado, “Surrogate-based analysis and design optimization of power delivery networks,” *IEEE Trans. Electromagnetic Compatibility*, vol. 62, no. 6, pp. 2528-2537, Dec. 2020. (p-ISSN: 0018-9375; e-ISSN: 1558-187X; published online: 24 Mar. 2020; INSPEC: 20261130; DOI: 10.1109/TEM.2020.2973946)

<https://ieeexplore.ieee.org/document/9046299/>

- [R28] G. Rafael-Valdivia and J. E. Rayas-Sánchez, “The second IEEE MTT-S Latin America microwave conference [Conference Report],” *IEEE Microwave Magazine*, vol. 21, no. 1, pp. 114-118, Jan. 2020. (p-ISSN: 1527-3342; e-ISSN: 1557-9581; published online: 26 Nov. 2019; DOI: 10.1109/MMM.2019.2945217)
<https://ieeexplore.ieee.org/document/8913744/>
- [R27] A. Viveros-Wacher, J. E. Rayas-Sánchez, and Z. Brito-Brito, “Analog gross fault identification in RF circuits using neural models and constrained parameter extraction,” *IEEE Trans. Microwave Theory Techn.*, vol. 67, no. 6, pp. 2143-2150, Jun. 2019. (p-ISSN: 0018-9480; e-ISSN: 1557-9670; INSPEC: 18734819; published online: 21 May 2019; DOI: 10.1109/TMTT.2019.2914106)
<https://ieeexplore.ieee.org/document/8718811/>
- [R26] I. Lomelí-Illescas, S. A. Solis-Bustos, and J. E. Rayas-Sánchez, “A tool for the automatic generation and analysis of regular analog layout modules,” *Elsevier Integration - the VLSI Journal*, vol. 65, pp. 81-87, Mar. 2019. (p-ISSN: 0167-9260; published online: 30 Nov. 2018; DOI: 10.1016/j.vlsi.2018.11.005)
<https://www.sciencedirect.com/science/article/abs/pii/S0167926018301500>
- [R25] F. E. Rangel-Patiño, J. E. Rayas-Sánchez, A. Viveros-Wacher, J. L. Chávez-Hurtado, E. A. Vega-Ochoa, and N. Hakim, “Post-silicon receiver equalization metamodeling by artificial neural networks,” *IEEE Trans. Computer-Aided Design of Integrated Circuits and Systems*, vol. 38, no. 4, pp. 733-740, Apr. 2019. (p-ISSN: 0278-0070; e-ISSN: 1937-4151; INSPEC: 18529158; published online: 8 May 2018; DOI: 10.1109/TCAD.2018.2834403)
<https://ieeexplore.ieee.org/document/8355951>
- [R24] F. E. Rangel-Patiño, A. Viveros-Wacher, J. E. Rayas-Sánchez, I. Durón-Rosales, E. A. Vega-Ochoa, N. Hakim, and E. López-Miralrio, “A holistic formulation for system margining and jitter tolerance optimization in industrial post-silicon validation,” *IEEE Trans. Emerging Topics Computing*, vol. 8, no. 2, pp. 453-463, Apr.-Jun. 2020. (p-ISSN: 2376-4562; e-ISSN: 2168-6750; published online: 29 Sep. 2017; INSPEC: 19826401; DOI: 10.1109/TETC.2017.2757937)
<https://ieeexplore.ieee.org/document/8053840>
- [R23] J. E. Rayas-Sánchez and G. E. Ponchak, “The first IEEE MTT-S Latin America microwave conference [Conference Report],” *IEEE Microwave Magazine*, vol. 18, no. 6, pp. 128-131, Sep.-Oct. 2017. (p-ISSN: 1527-3342; e-ISSN: 1557-9581; published online: 8 Aug. 2017; DOI: 10.1109/MMM.2017.2712067)
<https://ieeexplore.ieee.org/document/8003596>
- [R22] F. E. Rangel-Patiño, J. L. Chávez-Hurtado, A. Viveros-Wacher, J. E. Rayas-Sánchez, and N. Hakim, “System margining surrogate-based optimization in post-silicon validation,” *IEEE Trans. Microwave Theory Techn.*, vol. 65, no. 9, pp. 3109-3115, Sep. 2017. (p-ISSN: 0018-9480; e-ISSN: 1557-9670; INSPEC: 17155317; published online: 29 May 2017; DOI: 10.1109/TMTT.2017.2701368)
<https://ieeexplore.ieee.org/document/7935351>
- [R21] J. L. Chávez-Hurtado and J. E. Rayas-Sánchez, “Polynomial-based surrogate modeling of RF and microwave circuits in frequency domain exploiting the multinomial theorem,” *IEEE Trans. Microwave Theory Techn.*, vol. 64, no. 12, pp. 4371-4381, Dec. 2016. (p-ISSN: 0018-9480; e-ISSN: 1557-9670; INSPEC: 16519017; published online: 17 Nov. 2016; DOI: 10.1109/TMTT.2016.2623902)
<https://ieeexplore.ieee.org/document/7747529>
- [R20] J. E. Rayas-Sánchez, “Power in simplicity with ASM: tracing the aggressive space mapping algorithm over two decades of development and engineering applications,” *IEEE Microwave Magazine*, vol. 17, no.

- 4, pp. 64-76, Apr. 2016. (p-ISSN: 1527-3342; INSPEC: 15823213; published online: 7 Mar. 2016; DOI: 10.1109/MMM.2015.2514188)
<https://ieeexplore.ieee.org/document/7423860>
- [R19] J. C. Cervantes-González, J. E. Rayas-Sánchez, C. A. López, J. R. Camacho-Pérez, Z. Brito-Brito, and J. L. Chávez-Hurtado, "Space mapping optimization of handset antennas considering EM effects of mobile phone components and human body," *Int. J. RF and Microwave CAE*, vol. 26, no. 2, pp. 121-128, Feb. 2016. (p-ISSN: 1096-4290; e-ISSN: 1099-047X; published online: 21 Oct. 2015, DOI: 10.1002/mmce.20945)
<https://onlinelibrary.wiley.com/doi/abs/10.1002/mmce.20945>
- [R18] J. E. Rayas-Sánchez, J. L. Chávez-Hurtado, and Z. Brito-Brito, "Optimization of full-wave EM models by low-order low-dimension polynomial surrogate functionals," *Int. J. Numerical Modelling: Electron. Networks, Dev. Fields*, vol. 30, no. 3-4, e2094, May-Aug. 2017. (ISSN: 0894-3370; Online ISSN: 1099-1204; published online: 13 Sep. 2015, DOI: 10.1002/jnm.2094)
<https://onlinelibrary.wiley.com/doi/abs/10.1002/jnm.2094>
- [R17] L. M. Aguilar-Lobo, J. R. Loo-Yau, J. E. Rayas-Sánchez, S. Ortega-Cisneros, P. Moreno, and J. A. Reynoso-Hernández, "Application of the NARX neural network as a digital predistortion technique for linearizing microwave power amplifiers," *Microwave and Optical Technology Letters*, vol. 57, no. 9, pp. 2137-2142, Sep. 2015. (p-ISSN: 0895-2477; e-ISSN: 1098-2760; DOI: 10.1002/mop.29281)
<https://onlinelibrary.wiley.com/doi/abs/10.1002/mop.29281>
- [R16] J. E. Rayas-Sánchez, D. Pasquet, B. Szendrenyi, and M. S. Gupta, "MTT-S Mexico trip: addressing the RF and microwave community in Mexico," *IEEE Microwave Magazine*, vol. 16, no. 7, pp. 104-107, Aug. 2015. (p-ISSN: 1527-3342; e-ISSN: 1557-9581; DOI: 10.1109/MMM.2015.2431240)
<https://ieeexplore.ieee.org/document/7153052>
- [R15] R. Murphy, R. Torres, J. E. Rayas-Sánchez, A. Reynoso, M. Maya-Sánchez, A. Henze, A. Zozaya, P. del Pino, J. Pena, and G. Rafael-Valdivia, "R&D in Latin America: RF and microwave research in Latin America," *IEEE Microwave Magazine*, vol. 15, no. 3, pp. 97-103, May 2014. (p-ISSN: 1527-3342; e-ISSN: 1557-9581; INSPEC:14209986; DOI: 10.1109/MMM.2014.2302660)
<https://ieeexplore.ieee.org/document/6782376>
- [R14] V. Gutiérrez-Ayala and J. E. Rayas-Sánchez, "Neural input space mapping optimization based on nonlinear two-layer perceptrons with optimized nonlinearity," *Int. J. RF and Microwave CAE*, vol. 20, no. 5, pp. 512-526, Sep. 2010. (p-ISSN: 1096-4290; e-ISSN: 1099-047X; IDS: 642LB; DOI: 10.1002/mmce.20457)
<https://onlinelibrary.wiley.com/doi/abs/10.1002/mmce.20457>
- [R13] Q. S. Cheng, J. W. Bandler, and J. E. Rayas-Sánchez, "Tuning-aided implicit space mapping," *Int. J. RF and Microwave CAE*, vol. 18, no. 5, pp. 445-453, Sep. 2008. (p-ISSN: 1096-4290; e-ISSN: 1099-047X; IDS: 343MB; DOI: 10.1002/mmce.20303)
<https://onlinelibrary.wiley.com/doi/abs/10.1002/mmce.20303>
- [R12] J. E. Rayas-Sánchez and V. Gutiérrez-Ayala, "EM-based Monte Carlo analysis and yield prediction of microwave circuits using linear-input neural-output space mapping," *IEEE Trans. Microwave Theory Techn.*, vol. 54, no. 12, pp. 4528-4537, Dec. 2006. (p-ISSN: 0018-9480; e-ISSN: 1557-9670; INSPEC: 9214423; IDS: 118NM; DOI: 10.1109/TMTT.2006.885902)
<https://ieeexplore.ieee.org/document/4020482>

- [R11] J. E. Rayas-Sánchez, F. Lara-Rojo, and E. Martínez-Guerrero, "A linear inverse space mapping (LISM) algorithm to design linear and nonlinear RF and microwave circuits," *IEEE Trans. Microwave Theory Techn.*, vol. 53, no. 3, pp. 960-968, Mar. 2005. (p-ISSN: 0018-9480; e-ISSN: 1557-9670; INSPEC: 8364580; IDS: 904GV; DOI: 10.1109/TMTT.2004.842482)
<https://ieeexplore.ieee.org/document/1406292>
- [R10] J. E. Rayas-Sánchez, "A frequency-domain approach to interconnect crosstalk simulation and minimization," *Elsevier Microelectronics Reliability*, vol. 44, no. 4, pp. 673-681, Apr. 2004. (ISSN: 0026-2714; IDS: 807YG; DOI: 10.1016/j.microrel.2003.10.013)
<https://www.sciencedirect.com/science/article/abs/pii/S0026271403004396>
- [R9] J. E. Rayas-Sánchez, "EM-based optimization of microwave circuits using artificial neural networks: the state of the art," *IEEE Trans. Microwave Theory Techn.*, vol. 52, no. 1, pp. 420-435, Jan. 2004. (p-ISSN: 0018-9480; e-ISSN: 1557-9670; INSPEC: 7989285; IDS: 769LK; DOI: 10.1109/TMTT.2003.820897)
<https://ieeexplore.ieee.org/document/1262733>
- [R8] J. W. Bandler, M. A. Ismail, J. E. Rayas-Sánchez, and Q. J. Zhang, "Neural inverse space mapping (NISM) for EM-based microwave design," *Int. J. RF and Microwave CAE*, vol. 13, no. 2, pp. 136-147, Mar. 2003. (p-ISSN: 1096-4290; e-ISSN: 1099-047X; IDS: 655TU; DOI: 10.1002/mmce.10067)
<https://onlinelibrary.wiley.com/doi/abs/10.1002/mmce.10067>
- [R7] J. W. Bandler, M. A. Ismail, and J. E. Rayas-Sánchez, "Expanded space mapping EM based design framework exploiting preassigned parameters," *IEEE Trans. Circuits Sys. I*, vol. 49, no. 12, pp. 1833-1838, Dec. 2002. (p-ISSN: 1057-7122; IDS: 633FZ; DOI: 10.1109/TCSI.2002.805716)
<https://ieeexplore.ieee.org/document/1159117>
- [R6] J. W. Bandler, J. E. Rayas-Sánchez, and Q. J. Zhang, "Yield-driven electromagnetic optimization via space mapping-based neuromodels," *Int. J. RF and Microwave CAE*, vol. 12, no. 1, pp. 79-89, Jan. 2002. (p-ISSN: 1096-4290; e-ISSN: 1099-047X; IDS: 501UY; DOI: 10.1002/mmce.10015)
<https://onlinelibrary.wiley.com/doi/abs/10.1002/mmce.10015>
- [R5] J. W. Bandler, M. A. Ismail, and J. E. Rayas-Sánchez, "Broadband physics-based modeling of microwave passive devices through frequency mapping," *Int. J. RF and Microwave CAE*, vol. 11, no. 3, pp. 156-170, May 2001. (p-ISSN: 1096-4290; e-ISSN: 1099-047X; IDS: 427JV; DOI: 10.1002/mmce.1017)
<https://onlinelibrary.wiley.com/doi/abs/10.1002/mmce.1017>
- [R4] J. W. Bandler, N. Georgieva, M. A. Ismail, J. E. Rayas-Sánchez, and Q. J. Zhang, "A generalized space mapping tableau approach to device modeling," *IEEE Trans. Microwave Theory Techn.*, vol. 49, no. 1, pp. 67-79, Jan. 2001. (p-ISSN: 0018-9480; e-ISSN: 1557-9670; INSPEC: 6842579; IDS: 398AX; DOI: 10.1109/22.899963)
<https://ieeexplore.ieee.org/document/899963>
- [R3] M. H. Bakr, J. W. Bandler, K. Madsen, J. E. Rayas-Sánchez, and J. Søndergaard, "Space mapping optimization of microwave circuits exploiting surrogate models," *IEEE Trans. Microwave Theory Techn.*, vol. 48, no. 12, pp. 2297-2306, Dec. 2000. (p-ISSN: 0018-9480; e-ISSN: 1557-9670; INSPEC: 6842510; IDS: 397RN; DOI: 10.1109/22.898978)
<https://ieeexplore.ieee.org/document/898978>
- [R2] M. H. Bakr, J. W. Bandler, M. A. Ismail, J. E. Rayas-Sánchez, and Q. J. Zhang, "Neural space mapping optimization for EM-based design," *IEEE Trans. Microwave Theory Techn.*, vol. 48, no. 12, pp. 2307-2315, Dec. 2000. (p-ISSN: 0018-9480; e-ISSN: 1557-9670; INSPEC: 6842511; IDS: 397RN; DOI: 10.1109/22.898979)

<https://ieeexplore.ieee.org/document/898979>

- [R1] J. W. Bandler, M. A. Ismail, J. E. Rayas-Sánchez, and Q. J. Zhang, “Neuromodeling of microwave circuits exploiting space mapping technology,” *IEEE Trans. Microwave Theory Techn.*, vol. 47, no. 12, pp. 2417-2427, Dec. 1999. (p-ISSN: 0018-9480; e-ISSN: 1557-9670; INSPEC: 6464174; DOI: 10.1109/22.808989)
<https://ieeexplore.ieee.org/document/808989>

1.2. Artículos publicados en memorias de congresos internacionales con riguroso arbitraje

- [C113] K. G. López-Araiza, F. E. Rangel-Patiño, J. E. Ascencio-Blancarte E. A. Vega-Ochoa, J. E. Rayas-Sánchez, and O. Longoria-Gándara, “A multi-stage CTLE design and optimization for PCI Express Gen6.0 link equalization,” in *IEEE Latin American Electron Devices Conf. (LAEDC)*, Puebla, Mexico, Jul. 2023, pp. 1-4. (pending publication in IEEE Xplore)
- [C112] F. E. Rangel-Patiño, A. Viveros-Wacher, C. Rajyaguru, E. A. Vega-Ochoa, S. D. Rodriguez-Saenz, J. L. Silva-Cortes, H. Shival, and J. E. Rayas-Sánchez, “PCIe Gen5 physical layer equalization tuning by using K-means clustering and Gaussian process regression modeling in industrial post-silicon validation,” in *IEEE MTT-S Int. Conf. Numer. EM Mutiphysics Modeling Opt. (NEMO-2023)*, Winnipeg, MB, Canada, Jun. 2023, pp. 162-165. (ISSN: 2575-4742; e-ISSN: 2575-4769; ISBN: 979-8-3503-4741-8; e-ISBN: 979-8-3503-4740-1; INSPEC: (pending); DOI: 10.1109/NEMO56117.2023.10202321)
- [C111] F. E. Rangel-Patiño, A. Viveros-Wacher, C. Rajyaguru, E. A. Vega-Ochoa, S. D. Rodriguez-Saenz, J. L. Silva-Cortes, H. Shival, and J. E. Rayas-Sánchez, “Equalization tuning of the PCIe physical layer by using machine learning in industrial post-silicon validation,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, San Diego, CA, Jun. 2023, pp. 628. (ISSN: 0149-645X; ISSN-e: 2576-7216; ISBN: 978-1-6654-9614-8; e-ISBN: 978-1-6654-9613-1; INSPEC: ***; DOI: ***)
- [C110] J. E. Rayas-Sánchez and J. W. Bandler, “Basic space mapping: a retrospective and its application to design optimization of nonlinear RF and microwave circuits,” in *European Microwave Conf. (EuMC-2022)*, Milan, Italy, Sep. 2022, pp. 12-15. (ISBN: 978-1-6654-5881-8; e-ISBN: 978-2-8748-7069-9; INSPEC: 23385887; DOI: 10.23919/EuMC54642.2022.9991871)
- [C109] J. E. Rayas-Sánchez and J. W. Bandler, “System-level measurement-based design optimization by space mapping technology,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Denver CO, Jun. 2022, pp. 118-120. (ISSN: 0149-645X; ISSN-e: 2576-7216; ISBN: 978-1-6654-9614-8; e-ISBN: 978-1-6654-9613-1; INSPEC: 22011267; DOI: 10.1109/IMS37962.2022.9865412)
- [C108] A. Pietrenko-Dabrowska, S. Koziel, J. W. Bandler, and J. E. Rayas-Sánchez, “EM-driven tolerance optimization of compact microwave components using response feature surrogates,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Denver CO, Jun. 2022, pp. 107-110. (ISSN: 0149-645X; ISSN-e: 2576-7216; ISBN: 978-1-6654-9614-8; e-ISBN: 978-1-6654-9613-1; INSPEC: 22011238; DOI: 10.1109/IMS37962.2022.9865578)
- [C107] A. E. Moreno-Mojica, J. E. Rayas-Sánchez, and F. J. Leal-Romo, “Optimizing a buck voltage regulator and the number of decoupling capacitors for a PDN application,” in *IEEE MTT-S Latin America Microwave Conf. (LAMC-2021)*, Cali, Colombia, May 2021, pp. 1-4. (ISBN: 978-1-7281-9359-5; e-ISBN: 978-1-7281-9358-8; INSPEC: 21435108; DOI: 10.1109/LAMC50424.2021.9601574)

- [C106] R. J. Ruiz-Urbina, F. E. Rangel-Patiño, J. E. Rayas-Sánchez, E. A. Vega-Ochoa, and O. Longoria-Gándara, “Transmitter and receiver equalizers optimization for PCI Express Gen6.0 based on PAM4,” in *IEEE MTT-S Latin America Microwave Conf. (LAMC-2021)*, Cali, Colombia, May 2021, pp. 1-4. (ISBN: 978-1-7281-9359-5; e-ISBN: 978-1-7281-9358-8; INSPEC: 21435117; DOI: 10.1109/LAMC50424.2021.9601893)
- [C105] A. E. Moreno-Mojica, J. E. Rayas-Sánchez, and F. J. Leal-Romo, “Power delivery network impedance profile and voltage droop optimization,” in *European Microwave Conf. (EuMC-2020)*, Utrecht, The Netherlands, Jan. 2021, pp. 260-263. (ISBN: 978-1-7281-7039-8; e-ISBN: 978-2-87487-059-0; INSPEC: 20405031; DOI: 10.23919/EuMC48046.2021.9338232)
- [C104] R. Loera-Díaz and J. E. Rayas-Sánchez, “An objective function formulation for circuit parameter extraction based on the Kullback-Leibler distance,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Los Angeles, CA, Aug. 2020, pp. 80-82. (ISSN: 0149-645X; ISSN-e: 2576-7216; ISBN: 978-1-7281-6816-6; e-ISBN: 978-1-7281-6815-9; INSPEC: 20054460; DOI: 10.1109/IMS30576.2020.9224002)
- [C103] J. E. Rayas-Sánchez, F. E. Rangel-Patiño, B. Mercado-Casillas, F. Leal-Romo, and J. L. Chávez-Hurtado, “Machine learning techniques and space mapping approaches to enhance signal and power integrity in high-speed links and power delivery networks,” in *IEEE Latin American Symp. Circuits and Systems Dig. (LASCAS 2020)*, San Jose, Costa Rica, Feb. 2020, pp. 1-4. (ISSN: 2330-9954; eISSN: 2473-4667; ISBN: 978-1-7281-3428-4; e-ISBN: 978-1-7281-3427-7; INSPEC: 19534057; DOI: 10.1109/LASCAS45839.2020.9068994)
- [C102] B. Mercado-Casillas and J. E. Rayas-Sánchez, “Towards signal-power integrity analysis by efficient power delivery network lumped models obtained from parameter extraction,” in *Int. Conf. Electrical Performance of Electronic Packaging and Systems (EPEPS 2019)*, Montreal, Canada, Oct. 2019, pp. 1-3. (ISSN: 2165-4107; eISSN: 2165-4115; ISBN: 978-1-7281-4586-0; e-ISBN: 978-1-7281-4585-3; INSPEC: 19569119; DOI: 10.1109/EPEPS47316.2019.193214)
- [C101] J. E. Rayas-Sánchez and Z. Brito-Brito, “Applications of Broyden-based input space mapping to modeling and design optimization in high-tech companies in Mexico,” in *European Microwave Conf. (EuMC-2019)*, Paris, France, Oct. 2019, pp. 272-275. (p-ISBN: 978-1-7281-1798-0; e-ISBN: 978-2-87487-055-2; INSPEC: 19173832; DOI: 10.23919/EuMC.2019.8910799)
- [C100] R. J. Sánchez-Mesa, D. M. Cortés-Hernández, J. E. Rayas-Sánchez, Z. Brito-Brito, and L. de-la-Mora-Hernández, “EM parametric study of length matching elements exploiting an ANSYS HFSS Matlab-Python driver,” in *IEEE MTT-S Latin America Microwave Conf. (LAMC-2018)*, Arequipa, Peru, Dec. 2018, pp. 1-3. (ISBN: 978-1-5386-7334-8; e-ISBN: 978-1-5386-7333-1; INSPEC: 18620760; DOI: 10.1109/LAMC.2018.8699050)
- [C99] F. J. Leal-Romo, J. L. Chávez-Hurtado, and J. E. Rayas-Sánchez, “Selecting surrogate-based modeling techniques for power integrity analysis,” in *IEEE MTT-S Latin America Microwave Conf. (LAMC-2018)*, Arequipa, Peru, Dec. 2018, pp. 1-3. (ISBN: 978-1-5386-7334-8; e-ISBN: 978-1-5386-7333-1; INSPEC: 18635587; DOI: 10.1109/LAMC.2018.8699021)
- [C98] R. J. Sánchez-Mesa, D. M. Cortés-Hernández, B. Gálvez-Sahagún, J. E. Rayas-Sánchez, and Z. Brito-Brito, “A novel high-performance length matching element for high-speed interconnect differential channels,” in *IEEE MTT-S Latin America Microwave Conf. (LAMC-2018)*, Arequipa, Peru, Dec. 2018, pp. 1-3. (ISBN: 978-1-5386-7334-8; e-ISBN: 978-1-5386-7333-1; INSPEC: 18635570; DOI: 10.1109/LAMC.2018.8699027)

- [C97] F. E. Rangel-Patiño, J. E. Rayas-Sánchez, and N. Hakim, "Transmitter and receiver equalizers optimization methodologies for high-speed links in industrial computer platforms post-silicon validation," in *Int. Test Conf. (ITC-2018)*, Phoenix, AZ, Oct. 2018, pp. 1-10. (p-ISSN: 1089-3539; e-ISSN: 2378-2250; ISBN: 978-1-5386-8383-5; e-ISBN: 978-1-5386-8382-8; INSPEC: 18429815; DOI: 10.1109/TEST.2018.8624794)
- [C96] J. E. Rayas-Sánchez, F. E. Rangel-Patiño, A. Viveros-Wacher, J. L. Chávez-Hurtado, J. R. del-Rey, F. Leal-Romo, and Z. Brito-Brito, "Industry-oriented research projects on computer-aided design of high-frequency circuits and systems at ITESO Mexico," in *European Microwave Conf. (EuMC-2018)*, Madrid, Spain, Sep. 2018, pp. 588-591. (p-ISBN: 978-1-5386-5285-5; e-ISBN: 978-2-87487-051-4; <https://www.researchgate.net/publication/328346442>)
- [C95] A. Viveros-Wacher and J. E. Rayas-Sánchez, "Analog fault identification in RF circuits using artificial neural networks and constrained parameter extraction," in *IEEE MTT-S Int. Conf. Numer. EM Mutiphysics Modeling Opt. (NEMO-2018)*, Reykjavik, Iceland, Aug. 2018, pp. 1-3. (ISBN: 978-1-5386-5205-3; e-ISBN: 978-1-5386-5204-6; INSPEC: 18197592; DOI: 10.1109/NEMO.2018.8503117)
- [C94] F. E. Rangel-Patiño, J. E. Rayas-Sánchez, A. Viveros-Wacher, E. A. Vega-Ochoa, and N. Hakim, "High-speed links receiver optimization in post-silicon validation exploiting Broyden-based input space mapping," in *IEEE MTT-S Int. Conf. Numer. EM Mutiphysics Modeling Opt. (NEMO-2018)*, Reykjavik, Iceland, Aug. 2018, pp. 1-3. (ISBN: 978-1-5386-5205-3; e-ISBN: 978-1-5386-5204-6; INSPEC: 18197574; DOI: 10.1109/NEMO.2018.8503099)
- [C93] F. J. Leal-Romo, J. L. Silva-Perales, C. López-Limón, and J. E. Rayas-Sánchez, "Optimizing phase settings of high-frequency voltage regulators for power delivery applications," in *IEEE Workshop on Signal and Power Integrity (SPI-2018)*, Brest, France, May 2018, pp. 1-4. (ISBN: 978-1-5386-2300-8; e-ISBN: 978-1-5386-2299-5; INSPEC: 17895920; DOI: 10.1109/SaPIW.2018.8401657)
- [C92] F. E. Rangel-Patiño, J. E. Rayas-Sánchez, E. A. Vega-Ochoa, and N. Hakim, "Direct optimization of a PCI Express link equalization in industrial post-silicon validation," in *IEEE Latin American Test Symp. (LATS 2018)*, Sao Paulo, Brazil, Mar. 2018, poster.
- [C91] F. E. Rangel-Patiño, J. E. Rayas-Sánchez, E. A. Vega-Ochoa, and N. Hakim, "Direct optimization of a PCI Express link equalization in industrial post-silicon validation," in *IEEE Latin American Test Symp. (LATS 2018)*, Sao Paulo, Brazil, Mar. 2018, pp. 1-6. (ISSN: 2373-0862; ISBN: 978-1-5386-1473-0; e-ISBN: 978-1-5386-1472-3; INSPEC: 17749128; DOI: 10.1109/LATW.2018.8347238)
- [C90] A. Viveros-Wacher, R. Baca-Baylón, F. E. Rangel-Patiño, M. A. Dávalos-Santana, E. A. Vega-Ochoa, and J. E. Rayas-Sánchez, "Jitter tolerance acceleration using the golden section optimization technique," in *IEEE Latin American Symp. Circuits and Systems Dig. (LASCAS 2018)*, Puerto Vallarta, Mexico, Feb. 2018, pp. 1-4. (ISSN: 2473-4667; ISBN: 978-1-5386-2312-1; e-ISBN: 978-1-5386-2311-4; INSPEC: 17895466; DOI: 10.1109/LASCAS.2018.8399908)
- [C89] F. J. Leal-Romo, M. Cabrera-Gómez, J. E. Rayas-Sánchez, and D. M. García-Mora, "Design optimization of a planar spiral inductor using space mapping," in *Int. Conf. Electrical Performance of Electronic Packaging and Systems (EPEPS 2017)*, San Jose, CA, Oct. 2017, poster.
- [C88] F. J. Leal-Romo, M. Cabrera-Gómez, J. E. Rayas-Sánchez, and D. M. García-Mora, "Design optimization of a planar spiral inductor using space mapping," in *Int. Conf. Electrical Performance of Electronic Packaging and Systems (EPEPS 2017)*, San Jose, CA, Oct. 2017, pp. 1-3. (ISSN: 2165-4115; ISBN: 978-1-5386-3632-9; e-ISBN: 978-1-5386-3631-2; INSPEC: 17669457; DOI: 10.1109/EPEPS.2017.8329706)

- [C87] F. E. Rangel-Patiño, J. L. Chávez-Hurtado, A. Viveros-Wacher, J. E. Rayas-Sánchez, and N. Hakim, "Eye diagram system margining surrogate-based optimization in a server silicon validation platform," in *European Microwave Conf. (EuMC-2017)*, Nuremberg, Germany, Oct. 2017, pp. 540-543. (p-ISBN: 978-1-5386-3964-1; e-ISBN: 978-2-87487-047-7; <https://www.researchgate.net/publication/323571676>)
- [C86] J. E. Rayas-Sánchez and Z. Brito-Brito, "Academic and industrial research activities on RF and microwaves in Latin America: an overview," in *European Microwave Conf. (EuMC)*, Nuremberg, Germany, Oct. 2017, pp. 536-539. (p-ISBN: 978-1-5386-3964-1; e-ISBN: 978-2-87487-047-7; <https://www.researchgate.net/publication/323571599>)
- [C85] J. E. Rayas-Sánchez, "A historical account and technical reassessment of the Broyden-based input space mapping optimization algorithm," in *IEEE MTT-S Int. Microwave Symp. Dig.*, Honolulu, HI, Jun. 2017, pp. 1495-1497. (ISSN: 0149-645X; ISBN: 978-1-5090-6361-1; e-ISBN: 978-1-5090-6360-4; INSPEC: 17225293; DOI: 10.1109/MWSYM.2017.8058906)
- [C84] A. Corres-Matamoros, E. Martínez-Guerrero, and J. E. Rayas-Sánchez, "Design and validation of a portable radio-frequency diathermy prototype," in *Int. Caribbean Conf. Devices, Circuits, and Systems (ICCDCS-2017)*, Cozumel, Mexico, Jun. 2017, poster.
- [C83] A. Corres-Matamoros, E. Martínez-Guerrero, and J. E. Rayas-Sánchez, "Design and validation of a portable radio-frequency diathermy prototype," in *Int. Caribbean Conf. Devices, Circuits, and Systems (ICCDCS-2017)*, Cozumel, Mexico, Jun. 2017, pp. 93-96. (ISSN: 2165-3550; p-ISBN: 978-1-5386-1963-6; e-ISBN: 978-1-5386-1962-9; INSPEC: 16996066; DOI: 10.1109/ICCDCS.2017.7959710)
- [C82] I. Duron-Rosales, F. E. Rangel-Patiño, J. E. Rayas-Sánchez, J. L. Chávez-Hurtado, and N. Hakim, "Reconfigurable FIR filter coefficient optimization in post-silicon validation to improve eye diagram for optical interconnects," in *Int. Caribbean Conf. Devices, Circuits, and Systems (ICCDCS-2017)*, Cozumel, Mexico, Jun. 2017, pp. 85-88. (ISSN: 2165-3550; p-ISBN: 978-1-5386-1963-6; e-ISBN: 978-1-5386-1962-9; INSPEC: 16996086; DOI: 10.1109/ICCDCS.2017.7959697)
- [C81] A. Corres-Matamoros, E. Martínez-Guerrero, and J. E. Rayas-Sánchez, "A programmable CMOS voltage controlled ring oscillator for radio-frequency diathermy on-chip circuit," in *Int. Caribbean Conf. Devices, Circuits, and Systems (ICCDCS-2017)*, Cozumel, Mexico, Jun. 2017, pp. 65-68. (ISSN: 2165-3550; p-ISBN: 978-1-5386-1963-6; e-ISBN: 978-1-5386-1962-9; INSPEC: 16996077; DOI: 10.1109/ICCDCS.2017.7959721)
- [C80] I. Lomelí-Illescas, S. A. Solis-Bustos, and J. E. Rayas-Sánchez, "Analysis of the implications of stacked devices in nano-scale technologies for analog applications," in *IEEE Latin American Test Symp. (LATS-2017)*, Bogota, Colombia, Mar. 2017, pp. 1-4. (ISSN: 2373-0862; ISBN: 978-1-5386-0416-8; e-ISBN: 978-1-5386-0415-1; INSPEC: 16837112; DOI: 10.1109/LATW.2017.7906750)
- [C79] F. J. Leal-Romo, J. E. Rayas-Sánchez, and J. He, "Design of experiments implementation towards optimization of power distribution networks," in *IEEE Latin American Symp. Circuits and Systems Dig. (LASCAS 2017)*, Bariloche, Argentina, Feb. 2017, pp. 1-4. (ISSN: 2473-4667; ISBN: 978-1-5090-5860-0; e-ISBN: 978-1-5090-5859-4; INSPEC: 16964408; DOI: 10.1109/LASCAS.2017.7948102)
- [C78] A. Viveros-Wacher and J. E. Rayas-Sánchez, "Eye diagram optimization based on design of experiments (DoE) to accelerate industrial testing of high speed links," in *IEEE MTT-S Latin America Microwave Conf. (LAMC-2016)*, Puerto Vallarta, Mexico, Dec. 2016, pp. 1-3. (ISBN: 978-1-5090-4288-3; e-ISBN: 978-1-5090-4287-6; INSPEC: 16670752; DOI: 10.1109/LAMC.2016.7851249)

- [C77] F. E. Rangel-Patiño, A. Viveros-Wacher, J. E. Rayas-Sánchez, E. A. Vega-Ochoa, I. Duron-Rosales, and N. Hakim, "A holistic methodology for system margining and jitter tolerance optimization in post-silicon validation," in *IEEE MTT-S Latin America Microwave Conf. (LAMC-2016)*, Puerto Vallarta, Mexico, Dec. 2016, pp. 1-4. (ISBN: 978-1-5090-4288-3; e-ISBN: 978-1-5090-4287-6; INSPEC: 16670749; DOI: 10.1109/LAMC.2016.7851268)
- [C76] J. R. del-Rey, Z. Brito-Brito, J. E. Rayas-Sánchez, and N. Izquierdo, "Temperature effects in automotive-grade high speed interconnects," in *IEEE MTT-S Latin America Microwave Conf. (LAMC-2016)*, Puerto Vallarta, Mexico, Dec. 2016, poster.
- [C75] J. R. del-Rey, Z. Brito-Brito, J. E. Rayas-Sánchez, and N. Izquierdo, "Temperature effects in automotive-grade high speed interconnects," in *IEEE MTT-S Latin America Microwave Conf. (LAMC-2016)*, Puerto Vallarta, Mexico, Dec. 2016, pp. 1-4. (ISBN: 978-1-5090-4288-3; e-ISBN: 978-1-5090-4287-6; INSPEC: 16670767; DOI: 10.1109/LAMC.2016.7851273)
- [C74] J. L. Chávez-Hurtado, J. E. Rayas-Sánchez, and Z. Brito-Brito, "Multiphysics polynomial-based surrogate modeling of microwave structures in frequency domain," in *IEEE MTT-S Latin America Microwave Conf. (LAMC-2016)*, Puerto Vallarta, Mexico, Dec. 2016, pp. 1-3. (ISBN: 978-1-5090-4288-3; e-ISBN: 978-1-5090-4287-6; INSPEC: 16670760; DOI: 10.1109/LAMC.2016.7851279)
- [C73] I. Lomelí-Illescas, S. A. Solis-Bustos, V. H. Martínez-Sánchez, and J. E. Rayas-Sánchez, "Synthesis tool for automatic layout generation of analog structures," in *IEEE ANDESCON Proc.*, Arequipa, Peru, Oct. 2016, pp. 1-4. (ISBN: 978-1-5090-2532-9; e-ISBN: 978-1-5090-2533-6; INSPEC: 16650408; DOI: 10.1109/ANDESCON.2016.7836218)
- [C72] J. L. Chávez-Hurtado and J. E. Rayas-Sánchez, "Polynomial-based surrogate modeling of microwave structures in frequency domain exploiting the multinomial theorem," in *IEEE MTT-S Int. Microwave Symp. Dig.*, San Francisco, CA, May 2016, pp. 1-3. (ISSN: 0149-645X; ISBN: 978-1-5090-0699-1; e-ISBN: 978-1-5090-0698-4; INSPEC: 16213637; DOI: 10.1109/MWSYM.2016.7540398)
- [C71] J. E. Rayas-Sánchez, J. L. Chávez-Hurtado, and Z. Brito-Brito, "Enhanced formulation for polynomial-based surrogate modeling of microwave structures in frequency domain," in *IEEE MTT-S Int. Conf. Numer. EM Multiphysics Modeling Opt. RF, Microw., Terahertz App. (NEMO-2015)*, Ottawa, Canada, Aug. 2015, pp. 1-3. (ISBN: 978-1-4799-6811-4; e-ISBN: 978-1-4799-6810-7; INSPEC: 15805348; DOI: 10.1109/NEMO.2015.7415094)
- [C70] Z. Brito-Brito, J. E. Rayas-Sánchez, and J. L. Chávez-Hurtado, "Enhanced procedure to setup the simulation bounding box and the meshing scheme of a 3D finite element EM simulator for planar microwave structures," in *IEEE MTT-S Int. Microwave Symp. Dig.*, Phoenix, AZ, May 2015, pp. 1-3. (ISSN: 0149-645X; ISBN: 978-1-4799-8274-5; INSPEC: 15326132; DOI: 10.1109/MWSYM.2015.7166960)
- [C69] J. R. del-Rey, Z. Brito-Brito, and J. E. Rayas-Sánchez, "Impedance matching analysis and EMC validation of a low-cost PCB differential interconnect," in *IEEE Latin American Test Symp. (LATS-2015)*, Puerto Vallarta, Mexico, Mar. 2015, pp. 1-5. (ISSN: 2373-0862; I; e-ISBN: 978-1-4673-6710-3; INSPEC: 15111168; DOI: 10.1109/LATW.2015.7102514)
- [C68] J. L. Chávez-Hurtado, J. E. Rayas-Sánchez, and Z. Brito-Brito, "Reliable full-wave EM simulation of a single-layer SIW interconnect with transitions to microstrip lines," in *COMSOL Conf.*, Boston, MA, Oct. 2014, pp. 1-5. (DOI: 10.13140/RG.2.1.2579.1445)

- [C67] L. M. Aguilar-Lobo, A. Garcia-Osorio, J. R. Loo-Yau, S. Ortega-Cisneros, P. Moreno, J. E. Rayas-Sánchez, and J. A. Reynoso-Hernández, “A digital predistortion technique based on a NARX network to linearize GaN class F power amplifiers,” in *IEEE Int. Midwest Symp. Circuits Syst.*, College Station, TX, Aug. 2014, poster.
- [C66] L. M. Aguilar-Lobo, A. Garcia-Osorio, J. R. Loo-Yau, S. Ortega-Cisneros, P. Moreno, J. E. Rayas-Sánchez, and J. A. Reynoso-Hernández, “A digital predistortion technique based on a NARX network to linearize GaN class F power amplifiers,” in *IEEE Int. Midwest Symp. Circuits Syst.*, College Station, TX, Aug. 2014, pp. 717-720. (p-ISSN: 1548-3746; p-ISBN: 978-1-4799-4134-6; e-ISBN: 978-1-4799-4132-2; INSPEC: 14631538; DOI: 10.1109/MWSCAS.2014.6908515)
- [C65] J. E. Rayas-Sánchez and Z. Brito-Brito, “Research activities on computer-aided modeling, design and optimization of RF and microwave circuits at ITESO Mexico,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Tampa, FL, Jun. 2014, pp. 1-3. (ISSN: 0149-645X; ISBN: 978-1-4799-3868-1; INSPEC: 14432494; DOI: 10.1109/MWSYM.2014.6848342)
- [C64] Z. Brito-Brito, J. E. Rayas-Sánchez, J. C. Cervantes-González, and C. A. López, “Impact of 3D EM model configuration on the direct optimization of microstrip structures,” in *COMSOL Conf.*, Boston, MA, Oct. 2013, pp. 1-5. (DOI: 10.13140/RG.2.1.3889.8641; <http://hdl.handle.net/11117/2784>)
- [C63] J. C. Cervantes-González, C. A. López, J. E. Rayas-Sánchez, Z. Brito-Brito, and G. Hernández-Sosa, “Return-loss minimization of package interconnects through input space mapping using FEM-based models,” in *Proc. SBMO/IEEE MTT-S Int. Microwave Optoelectronics Conf. (IMOC-2013)*, Rio de Janeiro, Brazil, Aug. 2013, pp. 1-4. (ISBN: 978-1-4799-1397-8; INSPEC: 13878011; DOI: 10.1109/IMOC.2013.6646607)
- [C62] J. E. Rayas-Sánchez, Z. Brito-Brito, J. C. Cervantes-González, and C. A. López, “Systematic configuration of coarsely discretized 3D EM solvers for reliable and fast simulation of high-frequency planar structures,” in *IEEE Latin American Symp. Circuits and Systems Dig. (LASCAS 2013)*, Cuzco, Peru, Feb. 2013, pp. 1-4. (ISSN: 2473-4667; p-ISBN: 978-1-4673-4897-3; DOI: 10.1109/LASCAS.2013.6519093)
- [C61] D. Becerra-Pérez and J. E. Rayas-Sánchez, “Optimization of the stub-alternated and serpentine microstrip structures to minimize far-end crosstalk,” in *IEEE Conf. Electrical Performance of Electronic Packaging and Systems (EPEPS 2012)*, Tempe, AZ, Oct. 2012, pp. 109-112. (ISSN: 2165-4115; e-ISBN: 978-1-4673-2537-0; p-ISBN: 978-1-4673-2539-4; INSPEC: 13308359; DOI: 10.1109/EPEPS.2012.6457854)
- [C60] J. E. Rayas-Sánchez, J. Aguilar-Torrentera, Z. Brito-Brito, J. C. Cervantes-González, and C. A. López, “EM simulation of a low-pass filter based on a microstrip defected ground structure,” in *COMSOL Conf.*, Boston, MA, Oct. 2012, pp. 1-6. (DOI: 10.13140/RG.2.1.1717.9606; <http://hdl.handle.net/11117/620>)
- [C59] J. E. Rayas-Sánchez and E. Estrada-Arámbula, “EM-based design optimization of microstrip lines traversing a rectangular gap in the reference plane,” in *Int. Conf. on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design (SMACD)*, Seville, Spain, Sep. 2012, pp. 197-200. (p-ISBN: 978-1-4673-0685-0; e-ISBN: 978-1-4673-0686-7; INSPEC: 13101579; DOI: 10.1109/SMACD.2012.6339451)
- [C58] J. E. Rayas-Sánchez and Q. J. Zhang, “On knowledge-based neural networks and neuro-space mapping,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Montreal, Canada, Jun. 2012, pp. 1-3. (ISSN: 0149-645X; e-ISBN: 978-1-4673-1086-4; p-ISBN: 978-1-4673-1085-7; DOI: 10.1109/MWSYM.2011.5972954)

- [C57] F. Leal-Romo, R. Moreyra-González, and J. E. Rayas-Sánchez, “HFSS automated driver based on non-GUI scripting for EM-based design of high-frequency circuits,” in *IEEE Latin American Symp. Circuits and Systems (LASCAS 2012)*, Playa del Carmen, Mexico, Feb. 2012, pp. 1-4. (ISSN: 2473-4667; p-ISBN: 978-1-4673-1207-3; e-ISBN: 978-1-4673-1208-0; INSPEC: 12674909; DOI: 10.1109/LASCAS.2012.6180324)
- [C56] J. E. Rayas-Sánchez and N. Vargas-Chávez, “A linear regression inverse space mapping algorithm for EM-based design optimization of microwave circuits,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Baltimore, MD, Jun. 2011, pp. 1-4. (ISSN: 0149-645X; e-ISBN: 978-1-61284-756-6; p-ISBN: 978-1-61284-754-2; INSPEC: 12180836; DOI: 10.1109/MWSYM.2011.5972954)
- [C55] J. E. Rayas-Sánchez, “EM-based design optimization of RF and microwave circuits using functional surrogate models,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Baltimore, MD, Jun. 2011.
- [C54] D. Becerra-Pérez and J. E. Rayas-Sánchez, “Driving Sonnet through a Python-based interface,” in *Int. Review of Progress in Applied Computational Electromagnetics (ACES 2011)*, Williamsburg, VA, Mar. 2011, pp. 412-417.
- [C53] J. E. Rayas-Sánchez and N. Vargas-Chávez, “Design optimization of microstrip lines with via fences through surrogate modeling based on polynomial functional interpolants,” in *IEEE Conf. Electrical Performance of Electronic Packaging and Systems (EPEPS 2010)*, Austin, TX, Oct. 2010, pp. 125-128. (p-ISSN: 2165-4107; e-ISSN: 2165-4115; e-ISBN: 978-1-4244-6866-9; p-ISBN: 978-1-4244-6865-2; INSPEC: 11664332)
- [C52] J. E. Rayas-Sánchez and D. E. Cordero-Baltazar, “Impact of base points distributions on the polynomial surrogate modeling of a substrate integrated waveguide with microstrip transitions,” in *Electronics, Robotics and Automotive Mechanics Conf. (CERMA 2010)*, Cuernavaca, Mexico, Sep. 2010, pp. 705-710. (p-ISBN: 978-1-4244-8149-1; INSPEC: 11761600; DOI: 10.1109/CERMA.2010.80)
- [C51] J. E. Rayas-Sánchez, J. Aguilar-Torrentera and J. A. Jasso-Urzúa, “Surrogate modeling of microwave circuits using polynomial functional interpolants,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Anaheim, CA, May 2010, pp. 197-200. (ISSN: 0149-645X; e-ISBN: 978-1-4244-6057-1; p-ISBN: 978-1-4244-6056-4; INSPEC: 11453118; DOI: 10.1109/MWSYM.2010.5517648)
- [C50] S. Ogurtsov, S. Koziel and J. E. Rayas-Sánchez, “Design optimization of a broadband microstrip-to-SIW transition using surrogate modeling and adaptive design specifications,” in *Int. Review of Progress in Applied Computational Electromagnetics (ACES 2010)*, Tampere, Finland, Apr. 2010, pp. 878-883.
- [C49] L. N. Pérez-Acosta and J. E. Rayas-Sánchez, “Design of a CMOS second order band-pass continuous time filter using numerical optimization,” in *IEEE Int. Midwest Symp. Circuits and Systems (MWSCAS 2009)*, Cancun, Mexico, Aug. 2009, pp. 204-207. (ISSN: 1548-3746; e-ISBN: 978-1-4244-4480-9; p-ISBN: 978-1-4244-4479-3; INSPEC: 10868687; DOI: 10.1109/MWSCAS.2009.5236116)
- [C48] J. L. Chávez-Hurtado, E. Martínez-Guerrero and J. E. Rayas-Sánchez, “Design of reusable CMOS OTAs using CAD tools,” in *IEEE Int. Midwest Symp. Circuits and Systems (MWSCAS 2009)*, Cancun, Mexico, Aug. 2009, pp. 228-231. (ISSN: 1548-3746; e-ISBN: 978-1-4244-4480-9; p-ISBN: 978-1-4244-4479-3; INSPEC: 10868803; DOI: 10.1109/MWSCAS.2009.5236110)
- [C47] J. E. Rayas-Sánchez, “Neural space mapping approaches to EM-based statistical analysis,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Boston, MA, Jun. 2009.

- [C46] J. E. Rayas-Sánchez and J. A. Jasso-Urzuá, "EM-based optimization of a single layer SIW with microstrip transitions using linear output space mapping," in *IEEE MTT-S Int. Microwave Symp. Dig.*, Boston, MA, Jun. 2009, pp. 525-528. (ISSN: 0149-645X; e-ISBN: 978-1-4244-2804-5; p-ISBN: 978-1-4244-2803-8; INSPEC: 10788740; DOI: 10.1109/MWSYM.2009.5165749)
- [C45] J. E. Rayas-Sánchez, "An improved EM-based design procedure for single-layer substrate integrated waveguide interconnects with microstrip transitions," in *IEEE MTT-S Int. Microwave Workshop Series in Region 9 (IMWS2009-R9) on Signal Integrity and High-Speed Interconnects*, Guadalajara, Mexico, Feb. 2009, pp. 27-30. (e-ISBN : 978-1-4244-2743-7; p-ISBN: 978-1-4244-2742-0; INSPEC: 10572111; DOI: 10.1109/IMWS.2009.4814902)
- [C44] J. E. Rayas-Sánchez and V. Gutiérrez-Ayala, "A general EM-based design procedure for single-layer substrate integrated waveguide interconnects with microstrip transitions," in *IEEE MTT-S Int. Microwave Symp. Dig.*, Atlanta, GA, Jun. 2008, pp. 983-986. (ISSN: 0149-645X; e-ISBN: 978-1-4244-1781-0; p-ISBN: 978-1-4244-1780-3; INSPEC: 10399075; DOI: 10.1109/MWSYM.2008.4632999)
- [C43] Q. J. Zhang and J. E. Rayas-Sánchez, "Fast parametric models for EM design using neural networks and space mapping," in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Atlanta, GA, Jun. 2008.
- [C42] L. N. Pérez-Acosta and J. E. Rayas-Sánchez, "A numerical optimization procedure to obtain SPICE MOSFET model level 1 parameters from model level 49," in *XIV International Workshop Iberchip (IWS 2008)*, Puebla, Mexico, Feb. 2008. (ISBN-13 978-968-7938-03-5)
- [C41] J. E. Rayas-Sánchez and V. Gutiérrez-Ayala, "EM-based parametric optimization of a transition from microstrip to substrate integrated waveguide interconnect," in *9th IEEE Latin-American Test Workshop (LATW 2008)*, Puebla, Mexico, Feb. 2008, pp. 145-150.
- [C40] L. J. Roglá, J. E. Rayas-Sánchez, V. E. Boria and J. Carbonell, "EM-based space mapping optimization of left-handed coplanar waveguide filters with split ring resonators," in *IEEE MTT-S Int. Microwave Symp. Dig.*, Honolulu, HI, Jun. 2007, pp. 111-114. (ISSN: 0149-645X; e-ISBN: 1-4244-0688-9; p-ISBN: 1-4244-0688-9; INSPEC: 9727520; DOI: 10.1109/MWSYM.2007.380267)
- [C39] L. N. Pérez-Acosta, J. E. Rayas-Sánchez and E. Martínez-Guerrero, "Optimal design of a classical CMOS OTA-Miller using numerical methods and SPICE simulations," in *XIII International Workshop Iberchip (IWS 2007)*, Lima, Peru, Mar. 2007, pp. 387-390. (ISBN: 978-9972-242-09-0)
- [C38] V. Gutiérrez-Ayala and J. E. Rayas-Sánchez, "High-frequency circuit design using a neural space-mapping algorithm based on a two-layer perceptron with optimized nonlinearity," in *Int. Conf. on Electronic Design Proc. (ICED 2006)*, Veracruz, Mexico, Nov. 2006, pp. 90-95.
- [C37] J. E. Rayas-Sánchez, "Linear-input and neural-output space mapping for highly accurate statistical analysis and yield prediction," in *Second Int. Workshop on Surrogate Modeling and Space Mapping for Engineering Optimization (SMSMEO-06)*, Lyngby, Denmark, Nov. 2006.
- [C36] J. E. Rayas-Sánchez and V. Gutiérrez-Ayala, "EM-based statistical analysis and yield estimation using linear-input and neural-output space mapping," in *IEEE MTT-S Int. Microwave Symp. Dig.*, San Francisco, CA, Jun. 2006, pp. 1597-1600. (ISSN: 0149-645X; e-ISBN: 0-7803-7542-5; p-ISBN: 0-7803-9541-7; INSPEC: 9098190; DOI: 10.1109/MWSYM.2006.249641)

- [C35] V. Gutiérrez-Ayala and J. E. Rayas-Sánchez, “Diseño de circuitos de alta frecuencia usando mapeo espacial neural con no-linealidad regulada,” in *XII International Workshop Iberchip (IWS 2006)*, San Jose, Costa Rica, Mar. 2006, pp. 150-153.
- [C34] Q. J. Zhang, L. Zhang and J. E. Rayas-Sánchez, “Automated modeling and neuro space mapping for microwave design,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Long Beach, CA, Jun. 2005.
- [C33] J. E. Rayas-Sánchez, “Electromagnetics-based design through inverse space mapping techniques,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Fort Worth, TX, Jun. 2004.
- [C32] J. E. Rayas-Sánchez, F. Lara-Rojo and E. Martínez-Guerrero, “A linear inverse space mapping algorithm for microwave design in the frequency and transient domains,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Fort Worth, TX, Jun. 2004, poster.
- [C31] J. E. Rayas-Sánchez, F. Lara-Rojo and E. Martínez-Guerrero, “A linear inverse space mapping algorithm for microwave design in the frequency and transient domains,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Fort Worth, TX, Jun. 2004, pp. 1847-1850. (ISSN: 0149-645X; p-ISBN: 0-7803-8331-1; INSPEC: 8058109; DOI: 10.1109/MWSYM.2004.1338966)
- [C30] J. E. Rayas-Sánchez and J. W. Bandler, “Yield optimization of microwave circuits using neural space mapping methods,” in *3rd Annual McMaster Optimization Conference: Theory and Applications (MOPTA 03)*, Hamilton, ON, July 2003, pp. 9.
- [C29] J. E. Rayas-Sánchez, “EM-based optimization of microwave circuits using artificial neural networks,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Philadelphia, PA, Jun. 2003.
- [C28] J. E. Rayas-Sánchez, “A frequency-domain approach to interconnect crosstalk simulation and minimization,” in *IX International Workshop Iberchip (IWS2003)*, Habana, Cuba, Mar. 2003. (ISBN: 959-261-105-X)
- [C27] J. E. Rayas-Sánchez and J.W. Bandler, “EM-based design through neural space mapping methods,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Seattle, WA, Jun. 2002.
- [C26] J. E. Rayas-Sánchez and J.W. Bandler, “Statistical design of high frequency electronic circuits using space mapping-based neuromodels,” in *VIII International Workshop Iberchip (IWS 2002)*, Guadalajara, Mexico, Apr. 2002.
- [C25] J. W. Bandler, J. E. Rayas-Sánchez and Q.J. Zhang, “Yield-driven EM optimization using space mapping-based neuromodels,” in *31st European Microwave Conf.*, London, England, Sep. 2001, vol. 2, pp. 117-120. (DOI: 10.1109/EUMA.2001.338979)
- [C24] J. W. Bandler, M. A. Ismail and J. E. Rayas-Sánchez, “Expanded space mapping optimization of microwave circuits exploiting preassigned parameters,” in *1st Annual McMaster Optimization Conference: Theory and Applications (MOPTA 01)*, Hamilton, ON, Aug. 2001.
- [C23] J. W. Bandler and J. E. Rayas-Sánchez, “Neural space mapping methods for device modeling and optimal design,” in *1st Annual McMaster Optimization Conference: Theory and Applications (MOPTA 01)*, Hamilton, ON, Aug. 2001.
- [C22] M. H. Bakr, J. W. Bandler, Q. S. Cheng, M. A. Ismail and J. E. Rayas-Sánchez, “SMX—A novel object-oriented optimization system,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Phoenix, AZ, May 2001, pp.

- 2083-2086. (ISSN: 0149-645X; p-ISBN: 0-7803-6538-0; INSPEC: 7036567; DOI: 10.1109/MWSYM.2001.967323)
- [C21] J. W. Bandler, M. A. Ismail and J. E. Rayas-Sánchez, “Expanded space mapping design framework exploiting preassigned parameters,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Phoenix, AZ, May 2001, pp. 1151-1154. (ISSN: 0149-645X; p-ISBN: 0-7803-6538-0; INSPEC: 7011989; DOI: 10.1109/MWSYM.2001.967095)
- [C20] J. W. Bandler, M. A. Ismail, J. E. Rayas-Sánchez and Q. J. Zhang, “Neural inverse space mapping EM-optimization,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Phoenix, AZ, May 2001, pp. 1007-1010. (ISSN: 0149-645X; p-ISBN: 0-7803-6538-0; INSPEC: 6999380; DOI: 10.1109/MWSYM.2001.967062)
- [C19] J. W. Bandler and J. E. Rayas-Sánchez, “Space Mapping Based Neuromodeling,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Phoenix, AZ, May 2001.
- [C18] J. W. Bandler, M. A. Ismail and J. E. Rayas-Sánchez, “Space mapping technology with applications in EM-based device modeling and statistical design,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Phoenix, AZ, May 2001.
- [C17] J. W. Bandler, M. H. Bakr, Q. S. Cheng, M. A. Ismail and J. E. Rayas-Sánchez, “Applications of space mapping optimization technology to filter design,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Phoenix, AZ, May 2001.
- [C16] J. W. Bandler, J. E. Rayas-Sánchez and Q. J. Zhang, “EM-based statistical analysis and yield optimization using space mapping based neuromodels,” in *Micronet Annual Workshop*, Ottawa, ON, Apr. 2001, pp. 69-70.
- [C15] J. W. Bandler, M. A. Ismail and J. E. Rayas-Sánchez, “Microwave device modeling exploiting generalized space mapping,” in *First Int. Workshop on Surrogate Modeling and Space Mapping for Engineering Optimization (SMSMEO-00)*, Lyngby, Denmark, Nov. 2000.
- [C14] M. H. Bakr, J. W. Bandler, M. A. Ismail, J. E. Rayas-Sánchez and Q. J. Zhang, “Neural space mapping optimization for EM-based design of RF and microwave circuits,” in *First Int. Workshop on Surrogate Modeling and Space Mapping for Engineering Optimization (SMSMEO-00)*, Lyngby, Denmark, Nov. 2000.
- [C13] J. W. Bandler, J. E. Rayas-Sánchez, M. A. Ismail and M. H. Bakr, “Space mapping based device modeling and circuit optimization,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Boston, MA, Jun. 2000.
- [C12] M. H. Bakr, J. W. Bandler, M. A. Ismail, J. E. Rayas-Sánchez and Q. J. Zhang, “Neural space mapping EM optimization of microwave structures,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Boston, MA, Jun. 2000, pp. 879-882. (ISSN: 0149-645X; p-ISBN: 0-7803-5687-X; INSPEC: 6684737; DOI: 10.1109/MWSYM.2000.863320)
- [C11] J. W. Bandler, M. A. Ismail and J. E. Rayas-Sánchez, “Broadband physics-based modeling of microwave passive devices through frequency mapping,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Boston, MA, Jun. 2000, pp. 969-972. (ISSN: 0149-645X, p-ISBN: 0-7803-5687-X; INSPEC: 6684758; DOI: 10.1109/MWSYM.2000.863518)
- [C10] M. H. Bakr, J. W. Bandler, K. Madsen, J. E. Rayas-Sánchez and J. Søndergaard, “Space mapping optimization of microwave circuits exploiting surrogate models,” in *IEEE MTT-S Int. Microwave Symp.*

- Dig.*, Boston, MA, Jun. 2000, pp. 1785-1788. (ISSN: 0149-645X; p-ISBN: 0-7803-5687-X; INSPEC: 6703922; DOI: 10.1109/MWSYM.2000.862325)
- [C9] J. W. Bandler, J. E. Rayas-Sánchez and Q. J. Zhang, “Software implementation of space mapping based neuromodels of microwave components,” in *Micronet Annual Workshop*, Ottawa, ON, Apr. 2000, pp. 67-68.
- [C8] J. W. Bandler, J. E. Rayas-Sánchez, F. Wang and Q. J. Zhang, “Realizations of Space Mapping based neuromodels of microwave components,” in *AP2000 Millennium Conf. on Antennas & Propagation*, Davos, Switzerland, Apr. 2000, vol. 1, pp. 460.
- [C7] J. W. Bandler, N. Georgieva, M. A. Ismail, J. E. Rayas-Sánchez, and Q. J. Zhang, “A generalized space mapping tableau approach to device modeling,” in *29th European Microwave Conf.*, Munich, Germany, Oct. 1999, vol. 3, pp. 231-234. (DOI: 10.1109/EUMA.1999.338480)
- [C6] J. W. Bandler, J. E. Rayas-Sánchez and Q. J. Zhang, “Neural modeling and space mapping: two approaches to circuit design,” in *XXVI URSI General Assembly*, Toronto, ON, Aug. 1999, p. 246.
- [C5] J. W. Bandler, M. A. Ismail, J. E. Rayas-Sánchez and Q. J. Zhang, “New directions in model development for RF/microwave components utilizing artificial neural networks and space mapping,” in *IEEE AP-S Int. Symp. Dig.*, Orlando, FL, July 1999, pp. 2572-2575. (p-ISBN: 0-7803-5639-x; INSPEC: 6489707; DOI: 10.1109/APS.1999.789334)
- [C4] J. W. Bandler, M. A. Ismail, J. E. Rayas-Sánchez and Q. J. Zhang, “Neuromodeling of microwave circuits exploiting space mapping technology,” in *IEEE MTT-S Int. Microwave Symp. Dig.*, Anaheim, CA, Jun. 1999, pp. 149-152. (p-ISBN: 0-7803-5135-5, e-ISBN: 0-7803-5135-5, INSPEC: 6307848; DOI: 10.1109/MWSYM.1999.779445)
- [C3] J. W. Bandler, M. H. Bakr and J. E. Rayas-Sánchez, “Accelerated optimization of mixed EM/circuit structures,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Anaheim, CA, Jun. 1999.
- [C2] J. W. Bandler and J. E. Rayas-Sánchez, “Circuit CAD and modeling through space mapping,” in *IEEE MTT-S Int. Microwave Symp. Workshop Notes and Short Courses*, Anaheim, CA, Jun. 1999.
- [C1] J. W. Bandler, J. E. Rayas-Sánchez and Q. J. Zhang, “Space mapping based neuromodeling of high frequency circuits,” in *Micronet Annual Workshop*, Ottawa, ON, Apr. 1999, pp. 122-123.

1.3. Capítulos de libros

- [BC4] F. E. Rangel-Patiño and J. E. Rayas-Sánchez, “Surrogate-based modeling and design optimization techniques for signal integrity in high-performance computer platforms,” in *Surrogate Modeling for High-Frequency Design: Recent Advances*, S. Koziel and A. Pietrenko-Dabrowska, Ed., Singapore: World Scientific Pub. Europe, 2022, ch. 5, pp. 153-211.
- <https://www.worldscientific.com/worldscibooks/10.1142/q0317> (book)
- https://www.worldscientific.com/doi/10.1142/9781800610750_0005 (chapter)

Título del libro: Surrogate Modeling for High-Frequency Design: Recent Advances (Editors: Slawomir Koziel and Anna Pietrenko-Dabrowska)
Título del capítulo: Surrogate-based Modeling and Design Optimization Techniques for Signal Integrity in High-Performance Computer Platforms
Autores del capítulo: Francisco Elías Rangel-Patiño and José Ernesto Rayas-Sánchez
Estado actual: Publicado (electrónicamente: Marzo 30, 2022; en papel: Abril 2022)
ISBN: 978-1-80061-074-3 (hardcover), 978-1-80061-076-7 (ebook)
DOI: <https://doi.org/10.1142/q0317> (book),
DOI: https://doi.org/10.1142/9781800610750_0005 (chapter)
País: Singapore
Editorial: World Scientific Publishing Europe Ltd
Edición: 2022
Páginas del libro: 398
Objetivo básico: Investigación y/o docencia a nivel posgrado.
Documento probatorio: Versión electrónica.

[BC3] J. E. Rayas-Sánchez, “Artificial neural networks and space mapping for EM-based modeling and design of microwave circuits,” in *Surrogate-Based Modeling and Optimization: Applications in Engineering*, S. Koziel and L. Leifsson, Ed., New York, NY: Springer, 2013, ch. 7, pp. 147-169.
<http://www.springer.com/us/book/9781461475507> (book)
https://link.springer.com/chapter/10.1007/978-1-4614-7551-4_7 (chapter)
DOI 10.1007/978-1-4614-7551-4_7.

Título del libro: Surrogate-Based Modeling and Optimization: Applications in Engineering (Editors: Slawomir Koziel and Leifur Leifsson)
Título del capítulo: Artificial Neural Networks and Space Mapping for EM-Based Modeling and Design of Microwave Circuits
Autores del capítulo: José Ernesto Rayas Sánchez
Estado actual: Publicado (electrónicamente: Junio 2013; en papel: Octubre 2013)
ISBN: 978-1-4614-7550-7 (Print) 978-1-4614-7551-4 (Online)
DOI: 10.1007/978-1-4614-7551-4
País: Estados Unidos
Editorial: Springer, New York
Edición: 2013
Páginas del libro: 412
Objetivo básico: Investigación y/o docencia a nivel posgrado.
Documento probatorio: Versión electrónica.

[BC2] J. E. Rayas-Sánchez, “Neural space mapping methods for EM-based yield estimation,” in *Simulation-Driven Design Optimization and Modeling for Microwave Engineering*, S. Koziel, X-S Yang, and Q. J. Zhang, Ed., London, England: Imperial College Press, 2013, ch. 11, pp. 271-310.
<http://www.worldscientific.com/worldscibooks/10.1142/p860> (book)
https://www.worldscientific.com/doi/abs/10.1142/9781848169173_0011 (chapter)
DOI: 10.1142/9781848169173_0011

Título del libro: Simulation-Driven Design Optimization and Modeling for Microwave Engineering (Editors: Slawomir Koziel, Xin-She Yang and Qi-Jun Zhang)
Título del capítulo: Neural Space Mapping Methods for EM-Based Yield Estimation
Autores del capítulo: José Ernesto Rayas Sánchez
Estado actual: Publicado (electrónicamente: Enero 2013; en papel: Junio 2013)
ISBN: 978-1-84816-916-6
País: Inglaterra
Editorial: *Imperial College Press*, Londres, Inglaterra
Edición: 2013
Páginas del libro: 501
Objetivo básico: Investigación y/o docencia a nivel posgrado.
Documento probatorio: Versión electrónica y ejemplar físico del libro.

[BC1] J. E. Rayas-Sánchez, “Electromagnetics-based design using artificial neural networks,” in *Special Topics of EMC at Chip and System Levels*, D. Lupi, Ed., Buenos Aires, Argentina: Dunken, Programa CYTED (Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo), 2006, ch. 3, pp. 75-129.

Título del libro: Special Topics of EMC at Chip and System Levels (Editor: Daniel Lupi)
Título del capítulo: Electromagnetics-Based Design Using Artificial Neural Networks
Autores del capítulo: José Ernesto Rayas Sánchez
Estado actual: Publicado
ISBN-10: 987-02-1884-9
ISBN-13: 978-987-02-1884-5
País: Argentina
Editorial: Dunken, Buenos Aires, Argentina
Programa CYTED (Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo)
Edición: Julio 2006
Páginas: 133
Objetivo básico: Investigación y/o docencia a nivel posgrado.
Documento probatorio: Ejemplares del libro.

2. Índices cuantitativos del impacto de la investigación del Dr. Rayas

Los principales índices cuantitativos del impacto de las publicaciones del Dr. Rayas a la fecha son como sigue¹:

Query: rayas-sanchez
 Query date: 08/August/2023
 Papers: 200
 Citations: 2638
 Cites/year: 105.52
 Cites/paper: 13.19
 Authors/paper: 2.54
h-index: 23
g-index: 49

3. Artículos científicos como autor principal más altamente citados

Los 10 artículos que han recibido mayor cantidad de citas hasta la fecha, en los que el Dr. Rayas es el autor principal, son los siguientes¹:

Número de citas	Referencia
422	[R9] J. E. Rayas-Sánchez, "EM-based optimization of microwave circuits using artificial neural networks: the state of the art," <i>IEEE Trans. Microwave Theory Techn.</i> , vol. 52, no. 1, pp. 420-435, Jan. 2004.
273	[R1] J. W. Bandler, M. A. Ismail, J. E. Rayas-Sánchez, and Q. J. Zhang, "Neuromodeling of microwave circuits exploiting space mapping technology," <i>IEEE Trans. Microwave Theory Techn.</i> , vol. 47, no. 12, pp. 2417-2427, Dec. 1999.
166	[R12] J. E. Rayas-Sánchez and V. Gutiérrez-Ayala, "EM-based Monte Carlo analysis and yield prediction of microwave circuits using linear-input neural-output space mapping," <i>IEEE Trans. Microwave Theory Techn.</i> , vol. 54, no. 12, pp. 4528-4537, Dec. 2006.
148	[R2] M. H. Bakr, J. W. Bandler, M. A. Ismail, J. E. Rayas-Sánchez, and Q. J. Zhang, "Neural space mapping optimization for EM-based design," <i>IEEE Trans. Microwave Theory Techn.</i> , vol. 48, no. 12, pp. 2307-2315, Dec. 2000.
139	[C44] J. E. Rayas-Sánchez and V. Gutiérrez-Ayala, "A general EM-based design procedure for single-layer substrate integrated waveguide interconnects with microstrip transitions," in <i>IEEE MTT-S Int. Microwave Symp. Dig.</i> , Atlanta, GA, Jun. 2008, pp. 983-986.
112	[R20] J. E. Rayas-Sánchez, "Power in simplicity with ASM: tracing the aggressive space mapping algorithm over two decades of development and engineering applications," <i>IEEE Microwave Magazine</i> , vol. 17, no. 4, pp. 64-76, Apr. 2016.
57	[R11] J. E. Rayas-Sánchez, F. Lara-Rojo, and E. Martínez-Guerrero, "A linear inverse space mapping (LISM) algorithm to design linear and nonlinear RF and microwave circuits," <i>IEEE Trans. Microwave Theory Techn.</i> , vol. 53, no. 3, pp. 960-968, Mar. 2005.

¹ Tarma Software Research Pty Ltd (Copyright © 1990-2023), based on Google Scholar.

56	[R6] J. W. Bandler, J. E. Rayas-Sánchez, and Q. J. Zhang, "Yield-driven electromagnetic optimization via space mapping-based neuromodels," <i>Int. J. RF and Microwave CAE</i> , vol. 12, no. 1, pp. 79-89, Jan. 2002.
50	[R8] J. W. Bandler, M. A. Ismail, J. E. Rayas-Sánchez, and Q. J. Zhang, "Neural inverse space mapping (NISM) for EM-based microwave design," <i>Int. J. RF and Microwave CAE</i> , vol. 13, no. 2, pp. 136-147, Mar. 2003.
47	[R30] J. E. Rayas-Sánchez, S. Koziel, and J. W. Bandler, "Advanced RF and microwave design optimization: a journey and a vision of future trends," <i>IEEE J. of Microwaves</i> , vol. 1, no. 1, pp. 481-493, Jan. 2021.

El Dr. Rayas es el autor principal de los artículos [R1], [R2], [R6] y [R8] de la tabla anterior, como se hace constar en la constancia del Prof. John W. Bandler, de la Universidad McMaster, Canadá (incluida en la siguiente sección de este documento), ya que en esos artículos los autores aparecen en estricto orden alfabético

4. Constancia del Prof. J. W. Bandler, de la U. McMaster, Canadá



SIMULATION OPTIMIZATION SYSTEMS Research Laboratory

July 3, 2001

Sistema Nacional de Investigadores (SNI)
SEP-CONACYT
México

This will confirm that **José E. Rayas-Sánchez** is the principal author of the following papers.

Work Published

- [1] J.W. Bandler, J.E. Rayas-Sánchez and Q.J. Zhang, "Space mapping based neuromodeling of high frequency circuits," *Micronet Annual Workshop* (Ottawa, ON), 1999, pp. 122-123.
- [2] J.W. Bandler, M.A. Ismail, J.E. Rayas-Sánchez and Q.J. Zhang, "Neuromodeling of microwave circuits exploiting space mapping technology," *IEEE MTT-S Int. Microwave Symp. Digest* (Anaheim, CA), 1999, pp. 149-152.
- [3] J.W. Bandler, M.A. Ismail, J.E. Rayas-Sánchez and Q.J. Zhang, "New directions in model development for RF/microwave components utilizing artificial neural networks and space mapping," (invited), *IEEE AP-S Int. Symp. Digest* (Orlando, FL), 1999, pp. 2572-2575.
- [4] J.W. Bandler, J.E. Rayas-Sánchez and Q.J. Zhang, "Neural modeling and space mapping: two approaches to circuit design," (invited), *XXVI URSI General Assembly* (Toronto, ON), 1999, p. 246.
- [5] J.W. Bandler, M.A. Ismail, J.E. Rayas-Sánchez and Q.J. Zhang, "Neuromodeling of microwave circuits exploiting space mapping technology," *IEEE Trans. Microwave Theory Tech.*, vol. 47, 1999, pp. 2417-2427.
- [6] J.W. Bandler, J.E. Rayas-Sánchez, F. Wang and Q.J. Zhang, "Realizations of Space Mapping based neuromodels of microwave components," (invited) *AP2000 Millennium Conf. on Antennas & Propagation* (Davos, Switzerland), vol. 1, 2000, pp. 460.
- [7] J.W. Bandler, J.E. Rayas-Sánchez and Q.J. Zhang, "Software implementation of space mapping based neuromodels of microwave components," *Micronet Annual Workshop* (Ottawa, ON), 2000, pp. 67-68.
- [8] M.H. Bakr, J.W. Bandler, M.A. Ismail, J.E. Rayas-Sánchez and Q.J. Zhang, "Neural space mapping optimization of EM microwave structures," *IEEE MTT-S Int. Microwave Symp. Digest* (Boston, MA), 2000, pp. 879-882.

Page 1 of 3

- [9] M.H. Bakr, J.W. Bandler, M.A. Ismail, J.E. Rayas-Sánchez and Q.J. Zhang, "Neural space mapping optimization for EM-based design of RF and microwave circuits," *First Int. Workshop on Surrogate Modeling and Space Mapping for Engineering Optimization* (Lyngby, Denmark), November 2000.
- [10] M.H. Bakr, J.W. Bandler, M.A. Ismail, J.E. Rayas-Sánchez and Q.J. Zhang, "Neural space mapping optimization for EM-based design," *IEEE Trans. Microwave Theory Tech.*, vol. 48, 2000, pp. 2307-2315.
- [11] J.W. Bandler, J.E. Rayas-Sánchez and Q.J. Zhang, "Space mapping based neuromodeling of high frequency circuits," *Micronet Annual Workshop* (Ottawa, ON), 2001, pp. 69-70.
- [12] J.W. Bandler, M.A. Ismail, J.E. Rayas-Sánchez and Q.J. Zhang, "Neural inverse space mapping EM-optimization," *IEEE MTT-S Int. Microwave Symp. Digest* (Phoenix, AZ), 2001, pp. 1007-1010.

Work Accepted

- [13] J.W. Bandler and J.E. Rayas-Sánchez, "Neural space mapping methods for device modeling and optimal design," *1st. Annual McMaster Optimization Conf.* (Hamilton, Ontario), 2001.
- [14] J.W. Bandler, J.E. Rayas-Sánchez and Q.J. Zhang, "Yield driven EM optimization using space mapping-based neuromodels," *European Microwave Conf.* (London, England), 2001.
- [15] J.W. Bandler, J.E. Rayas-Sánchez and Q.J. Zhang, "Yield-driven electromagnetic optimization via space mapping-based neuromodels," *Int. J. RF and Microwave CAE*, 2001.

Work Submitted

- [1] J.W. Bandler, M.A. Ismail, J.E. Rayas-Sánchez and Q.J. Zhang, "Neural inverse space mapping (NISM) optimization for EM-based design of microwave structures," *IEEE Trans. Microwave Theory Tech.*, December 2001.

This will confirm that **José E. Rayas-Sánchez** collaborated in the following papers.

Work Published

- [1] J.W. Bandler, N. Georgieva, M.A. Ismail, J.E. Rayas-Sánchez and Q.J. Zhang, "A generalized space mapping tableau approach to device modeling," *European Microwave Conf.* (Munich, Germany), vol. 3, 1999, pp. 231-234.
- [2] M.H. Bakr, J.W. Bandler, K. Madsen, J.E. Rayas-Sánchez and J. Søndergaard, "Space mapping optimization of microwave circuits exploiting surrogate models," *IEEE MTT-S Int. Microwave Symp. Digest* (Boston, MA), 2000, pp. 1785-1788.



Page 2 of 3

- [3] J.W. Bandler, M.A. Ismail and J.E. Rayas-Sánchez, "Broadband physics-based modeling of microwave passive devices through frequency mapping," *IEEE MTT-S Int. Microwave Symp. Digest* (Boston, MA), 2000, pp. 969-972.
- [4] J.W. Bandler, M.A. Ismail and J.E. Rayas-Sánchez, "Microwave device modeling exploiting generalized space mapping," *First Int. Workshop on Surrogate Modeling and Space Mapping for Engineering Optimization* (Lyngby, Denmark), November 2000.
- [5] M.H. Bakr, J.W. Bandler, K. Madsen, J.E. Rayas-Sánchez and J. Søndergaard, "Space mapping optimization of microwave circuits exploiting surrogate models," *IEEE Trans. Microwave Theory Tech.*, vol. 48, 2000, pp. 2297-2306.
- [6] J.W. Bandler, N. Georgieva, M.A. Ismail, J.E. Rayas-Sánchez and Q.J. Zhang, "A generalized space mapping tableau approach to device modeling," *IEEE Trans. Microwave Theory Tech.*, vol. 49, 2001, pp. 67-79.
- [7] J.W. Bandler, M.A. Ismail and J.E. Rayas-Sánchez, "Expanded space mapping design framework exploiting preassigned parameters," *IEEE MTT-S Int. Microwave Symp. Digest* (Phoenix, AZ), 2001, pp. 1151-1154.
- [8] M.H. Bakr, J.W. Bandler, Q.S. Cheng, M.A. Ismail and J.E. Rayas-Sánchez, "SMX—A novel object-oriented optimization system," *IEEE MTT-S Int. Microwave Symp. Digest* (Phoenix, AZ), 2001, pp. 2083-2086.
- [9] J.W. Bandler, M.A. Ismail and J.E. Rayas-Sánchez, "Broadband physics-based modeling of microwave passive devices through frequency mapping," *Int. J. RF and Microwave CAE*, 2001, vol. 11, pp. 156-170.

Work Submitted

- [1] J.W. Bandler, M.A. Ismail and J.E. Rayas-Sánchez, "Expanded space mapping design framework exploiting preassigned parameters," *IEEE Trans. Microwave Theory Tech.*, December 2001.



John W. Bandler
Professor Emeritus

5. Gráfico de citas por año de las últimas dos décadas (*Google Scholar*)



(Hasta agosto 8, 2023)

Fuente:

https://scholar.google.com/citations?user=YhsODCoAAAAJ&hl=es#d=gsc_md_hist&t=1686015172080

6. Apéndice A: Reporte de *Google Scholar* sobre los 100 trabajos más citados



Jose Ernesto Rayas-Sanchez

ITESO
 - The Jesuit University of Guadalajara
 RF
 microwaves
 space mapping
 surrogate modeling
 artificial neural networks

CREAR MI PROPIO PERFIL

	Total	Desde 2018
Citas	2623	1159
Índice h	23	16
Índice i10	41	26

0 artículos 1 artículo

no disponibles disponibles

Basado en requisitos de financiación

TÍTULO	CITADO POR	AÑO
EM-based optimization of microwave circuits using artificial neural networks: The state-of-the-art JE Rayas-Sánchez IEEE Transactions on Microwave Theory and Techniques 52 (1), 420-435	422	2004
Neuromodeling of microwave circuits exploiting space-mapping technology JW Bandler, MA Ismail, JE Rayas-Sánchez, QJ Zhang IEEE Transactions on Microwave Theory and Techniques 47 (12), 2417-2427	273	1999
EM-based Monte Carlo analysis and yield prediction of microwave circuits using linear-input neural-output space mapping JE Rayas-Sanchez, V Gutierrez-Ayala IEEE transactions on microwave theory and techniques 54 (12), 4528-4537	166	2006
Neural space-mapping optimization for EM-based design MH Bakr, JW Bandler, MA Ismail, JE Rayas-Sánchez, QJ Zhang IEEE Transactions on Microwave Theory and Techniques 48 (12), 2307-2315	148	2000
A general EM-based design procedure for single-layer substrate integrated waveguide interconnects with microstrip transitions JE Rayas-Sanchez, V Gutierrez-Ayala 2008 IEEE MTT-S International Microwave Symposium Digest, 983-986	139	2008
Power in simplicity with ASM: Tracing the aggressive space mapping algorithm over two decades of development and engineering applications JE Rayas-Sanchez IEEE Microwave Magazine 17 (4), 64-76	112	2016
Space-mapping optimization of microwave circuits exploiting surrogate models MH Bakr, JW Bandler, K Madsen, JE Rayas-Sanchez, J Sondergaard IEEE Transactions on Microwave Theory and Techniques 48 (12), 2297-2306	101	2000
A generalized space-mapping tableau approach to device modeling JW Bandler, N Georgieva, MA Ismail, JE Rayas-Sánchez, QJ Zhang IEEE Transactions on Microwave Theory and Techniques 49 (1), 67-79	96	2001
Polynomial-based surrogate modeling of RF and microwave circuits in frequency domain exploiting the multinomial theorem	86	2016

TÍTULO	CITADO POR	AÑO
JL Chávez-Hurtado, JE Rayas-Sánchez IEEE Transactions on Microwave Theory and Techniques 64 (12), 4371-4381		
A linear inverse space-mapping (LISM) algorithm to design linear and nonlinear RF and microwave circuits JE Rayas-Sánchez, F Lara-Rojo, E Martínez-Guerrero IEEE transactions on microwave theory and techniques 53 (3), 960-968	57	2005
Yield-driven electromagnetic optimization via space mapping-based neuromodels JW Bandler, JE Rayas-Sánchez, QJ Zhang International Journal of RF and Microwave Computer-Aided Engineering: Co ...	56	2002
Neural inverse space mapping (NISM) optimization for EM-based microwave design JW Bandler, MA Ismail, JE Rayas-Sánchez, QJ Zhang International Journal of RF and Microwave Computer-Aided Engineering: Co ...	50	2003
Advanced RF and microwave design optimization: A journey and a vision of future trends JE Rayas-Sánchez, S Koziel, JW Bandler IEEE Journal of Microwaves 1 (1), 481-493	47	2021
Space mapping optimization of handset antennas considering EM effects of mobile phone components and human body JC Cervantes-González, JE Rayas-Sánchez, CA López, ... International Journal of RF and Microwave Computer-Aided Engineering 26 (2 ...	43	2016
Expanded space-mapping EM-based design framework exploiting preassigned parameters JW Bandler, MA Ismail, JE Rayas-Sánchez IEEE Transactions on Circuits and Systems I: Fundamental Theory and ...	43	2002
Neural input space mapping optimization based on nonlinear two-layer perceptrons with optimized nonlinearity V Gutiérrez-Ayala, JE Rayas-Sánchez International Journal of RF and Microwave Computer-Aided Engineering 20 (5 ...	37	2010
EM-based statistical analysis and yield estimation using linear-input and neural-output space mapping JE Rayas-Sánchez, V Gutiérrez-Ayala 2006 IEEE MTT-S International Microwave Symposium Digest, 1597-1600	34	2006
An improved EM-based design procedure for single-layer substrate integrated waveguide interconnects with microstrip transitions JE Rayas-Sanchez 2009 IEEE MTT-S International Microwave Workshop Series on Signal Integrity ...	28	2009
Neural Space Mapping Methods for Modeling and Design of Microwave Circuits JE Rayas-Sanchez McMaster University	28	2001

TÍTULO	CITADO POR	AÑO
<p>Tuning-aided implicit space mapping QS Cheng, JW Bandler, JE Rayas-Sánchez International Journal of RF and Microwave Computer-Aided Engineering: Co ...</p>	26	2008
<p>Neural space mapping EM optimization of microwave structures MH Bakr, JW Bandler, MA Ismail, JE Rayas-Sánchez, QJ Zhang 2000 IEEE MTT-S International Microwave Symposium Digest (Cat. No. 00CH37017 ...</p>	26	2000
<p>System margining surrogate-based optimization in post-silicon validation FE Rangel-Patiño, JL Chávez-Hurtado, A Viveros-Wacher, ... IEEE Transactions on Microwave Theory and Techniques 65 (9), 3109-3115</p>	23	2017
<p>Neural inverse space mapping EM-optimization JW Bandler, MA Ismail, JE Rayas-Sánchez, QJ Zhang 2001 IEEE MTT-S International Microwave Symposium Digest (Cat. No. 01CH37157 ...</p>	23	2001
<p>A frequency-domain approach to interconnect crosstalk simulation and minimization JE Rayas-Sánchez Microelectronics Reliability 44 (4), 673-681</p>	20	2004
<p>New directions in model development for RF/microwave components utilizing artificial neural networks and space mapping JW Bandler, MA Ismail, JE Rayas-Sánchez, QJ Zhang IEEE Antennas and Propagation Society International Symposium. 1999 Digest ...</p>	20	1999
<p>Post-silicon receiver equalization metamodeling by artificial neural networks FE Rangel-Patiño, JE Rayas-Sánchez, A Viveros-Wacher, ... IEEE Transactions on Computer-Aided Design of Integrated Circuits and ...</p>	19	2019
<p>Analog fault identification in RF circuits using artificial neural networks and constrained parameter extraction A Viveros-Wacher, JE Rayas-Sánchez 2018 IEEE MTT-S International Conference on Numerical Electromagnetic and ...</p>	19	2018
<p>Optimization of full-wave EM models by low-order low-dimension polynomial surrogate functionals JE Rayas-Sánchez, JL Chávez-Hurtado, Z Brito-Brito International Journal of Numerical Modelling: Electronic Networks, Devices ...</p>	19	2017
<p>A holistic methodology for system margining and jitter tolerance optimization in post-silicon validation FE Rangel-Patiño, A Viveros-Wacher, JE Rayas-Sánchez, ... 2016 IEEE MTT-S Latin America Microwave Conference (LAMC), 1-4</p>	18	2016
<p>Surrogate modeling of microwave circuits using polynomial functional interpolants JE Rayas-Sánchez, J Aguilar-Torrentera, JA Jasso-Urzúa 2010 IEEE MTT-S International Microwave Symposium, 197-200</p>	18	2010

TÍTULO	CITADO POR	AÑO
<p>EM-based optimization of a single layer SIW with microstrip transitions using linear output space mapping JE Rayas-Sánchez, JA Jasso-Urzúa 2009 IEEE MTT-S International Microwave Symposium Digest, 525-528</p>	18	2009
<p>On knowledge-based neural networks and neuro-space mapping JE Rayas-Sánchez, QJ Zhang 2012 IEEE/MTT-S International Microwave Symposium Digest, 1-3</p>	17	2012
<p>Surrogate-based analysis and design optimization of power delivery networks F de Jesús Leal-Romo, JE Rayas-Sánchez, JL Chávez-Hurtado IEEE Transactions on Electromagnetic Compatibility 62 (6), 2528-2537</p>	14	2020
<p>Analog gross fault identification in RF circuits using neural models and constrained parameter extraction A Viveros-Wacher, JE Rayas-Sánchez, Z Brito-Brito IEEE Transactions on Microwave Theory and Techniques 67 (6), 2143-2150</p>	14	2019
<p>A holistic formulation for system margining and jitter tolerance optimization in industrial post-silicon validation FE Rangel-Patiño, A Viveros-Wacher, JE Rayas-Sánchez, ... IEEE Transactions on Emerging Topics in Computing 8 (2), 453-463</p>	14	2017
<p>Multiphysics polynomial-based surrogate modeling of microwave structures in frequency domain JL Chávez-Hurtado, JE Rayas-Sánchez, Z Brito-Brito 2016 IEEE MTT-S Latin America Microwave Conference (LAMC), 1-3</p>	14	2016
<p>EM-based space mapping optimization of left-handed coplanar waveguide filters with split ring resonators LJ Rogla, JE Rayas-Sanchez, VE Boria, J Carbonell 2007 IEEE/MTT-S International Microwave Symposium, 111-114</p>	14	2007
<p>Application of the NARX neural network as a digital predistortion technique for linearizing microwave power amplifiers LM Aguilar-Lobo, JR Loo-Yau, JE Rayas-Sánchez, S Ortega-Cisneros, ... Microwave and Optical Technology Letters 57 (9), 2137-2142</p>	12	2015
<p>Design optimization of a broadband microstrip-to-SIW transition using surrogate modeling and adaptive design specifications JE Rayas-Sánchez, S Ogurtsov, S Koziel Int. Review of Progress in Applied Computational Electromagnetics ACES</p>	12	2010
<p>A programmable CMOS voltage controlled ring oscillator for radio-frequency diathermy on-chip circuit A Corres-Matamoros, E Martínez-Guerrero, JE Rayas-Sánchez 2017 International Caribbean Conference on Devices, Circuits and Systems ...</p>	11	2017
<p>Expanded space mapping design framework exploiting preassigned parameters JW Bandler, MA Ismail, JE Rayas-Sánchez</p>	10	2001

TÍTULO	CITADO POR	AÑO
2001 IEEE MTT-S International Microwave Symposium Digest (Cat. No. 01CH37157 ...		
Design optimization of a planar spiral inductor using space mapping FJ Leal-Romo, M Cabrera-Gómez, JE Rayas-Sánchez, DM García-Mora 2017 IEEE 26th conference on electrical performance of electronic packaging ...	9	2017
Synthesis tool for automatic layout generation of analog structures I Lomeli-Illescas, SA Solis-Bustos, VH Martínez-Sánchez, ... 2016 IEEE ANDESCON, 1-4	9	2016
R&D in Latin America: RF and microwave research in Latin America R Murphy, R Torres, JE Rayas-Sanchez, A Reynoso, ... IEEE Microwave Magazine 15 (3), 97-103	9	2014
Return-loss minimization of package interconnects through input space mapping using FEM-based models JC Cervantes-González, CA López, JE Rayas-Sánchez, Z Brito-Brito, ... 2013 SBMO/IEEE MTT-S International Microwave & Optoelectronics Conference ...	9	2013
Selecting surrogate-based modeling techniques for power integrity analysis FJ Leal-Romo, JL Chávez-Hurtado, JE Rayas-Sánchez 2018 IEEE MTT-S Latin America Microwave Conference (LAMC 2018), 1-3	8	2018
High-speed links receiver optimization in post-silicon validation exploiting Broyden-based input space mapping FE Rangel-Patiño, JE Rayas-Sánchez, A Viveros-Wacher, ... 2018 IEEE MTT-S International Conference on Numerical Electromagnetic and ...	8	2018
Eye diagram optimization based on design of experiments (DoE) to accelerate industrial testing of high speed links A Viveros-Wacher, JE Rayas-Sánchez 2016 IEEE MTT-S Latin America Microwave Conference (LAMC), 1-3	8	2016
Impact of 3D EM model configuration on the direct optimization of microstrip structures Z Brito-Brito, JE Rayas-Sánchez, JC Cervantes-González, CA López COMSOL	8	2013
A linear regression inverse space mapping algorithm for EM-based design optimization of microwave circuits JE Rayas-Sánchez, N Vargas-Chávez 2011 IEEE MTT-S International Microwave Symposium, 1-4	8	2011
Optimal design of a classical CMOS OTA-Miller using numerical methods and SPICE simulations LN Pérez-Acosta, JE Rayas-Sánchez, E Martínez-Guerrero XIII International Workshop Iberchip (IWS2007), 387-390	8	2007
A linear inverse space mapping algorithm for microwave design in the frequency and transient domains JE Rayas-Sánchez, F Lara-Rojo, E Martínez-Guerrero 2004 IEEE MTT-S International Microwave Symposium Digest (IEEE Cat. No ...	8	2004

TÍTULO	CITADO POR	AÑO
<p>Machine learning techniques and space mapping approaches to enhance signal and power integrity in high-speed links and power delivery networks JE Rayas-Sánchez, FE Rangel-Patiño, B Mercado-Casillas, F Leal-Romo, ... 2020 IEEE 11th Latin American Symposium on Circuits & Systems (LASCAS), 1-4</p>	7	2020
<p>Transmitter and receiver equalizers optimization methodologies for high-speed links in industrial computer platforms post-silicon validation FE Rangel-Patiño, JE Rayas-Sánchez, N Hakim 2018 IEEE International Test Conference (ITC), 1-10</p>	7	2018
<p>Eye diagram system margining surrogate-based optimization in a server silicon validation platform FE Rangel-Patiño, JL Chávez-Hurtado, A Viveros-Wacher, ... European Microwave Conf. (EuMC-2017), 540-543</p>	7	2017
<p>A digital predistortion technique based on a NARX network to linearize GaN class F power amplifiers LM Aguilar-Lobo, A Garcia-Osorio, JR Loo-Yau, S Ortega-Cisneros, ... 2014 IEEE 57th International Midwest Symposium on Circuits and Systems ...</p>	7	2014
<p>Artificial neural networks and space mapping for EM-based modeling and design of microwave circuits JE Rayas-Sánchez Surrogate-based modeling and optimization: applications in engineering, 147-169</p>	7	2013
<p>Power delivery network impedance profile and voltage droop optimization AE Moreno-Mojica, JE Rayas-Sánchez, FJ Leal-Romo 2020 50th European Microwave Conference (EuMC), 260-263</p>	6	2021
<p>Reconfigurable FIR filter coefficient optimization in post-silicon validation to improve eye diagram for optical interconnects I Duron-Rosales, FE Rangel-Patiño, JE Rayas-Sánchez, ... 2017 International Caribbean Conference on Devices, Circuits and Systems ...</p>	6	2017
<p>Impedance matching analysis and EMC validation of a low-cost PCB differential interconnect JR Del-rey, Z Brito-Brito, JE Rayas-Sánchez 2015 16th Latin-American Test Symposium (LATS), 1-5</p>	6	2015
<p>Design optimization of microstrip lines with via fences through surrogate modeling based on polynomial functional interpolants JE Rayas-Sánchez, N Vargas-Chávez 19th Topical Meeting on Electrical Performance of Electronic Packaging and ...</p>	6	2010
<p>Optimizing a buck voltage regulator and the number of decoupling capacitors for a PDN application AE Moreno-Mojica, JE Rayas-Sánchez, FJ Leal-Romo 2020 IEEE MTT-S Latin America Microwave Conference (LAMC 2020), 1-4</p>	5	2021
<p>Direct optimization of a PCI Express link equalization in industrial post-silicon validation FE Rangel-Patiño, JE Rayas-Sánchez, EA Vega-Ochoa, N Hakim</p>	5	2018

TÍTULO	CITADO POR	AÑO
2018 IEEE 19th Latin-American Test Symposium (LATS), 1-6		
Jitter tolerance acceleration using the golden section optimization technique A Viveros-Wacher, R Baca-Baylón, FE Rangel-Patiño, ... 2018 IEEE 9th Latin American Symposium on Circuits & Systems (LASCAS), 1-4	5	2018
Temperature effects in automotive-grade high speed interconnects JR del-Rey, Z Brito-Brito, JE Rayas-Sánchez, N Izquierdo 2016 IEEE MTT-S Latin America Microwave Conference (LAMC), 1-4	5	2016
Enhanced formulation for polynomial-based surrogate modeling of microwave structures in frequency domain JE Rayas-Sánchez, JL Chávez-Hurtado, Z Brito-Brito 2015 IEEE MTT-S International Conference on Numerical Electromagnetic and ...	5	2015
MTT-S Mexico trip: addressing the RF and microwave community in Mexico JE Rayas-Sanchez, D Pasquet, B Szendrenyi, MS Gupta IEEE Microwave Magazine	5	2015
Design of experiments implementation towards optimization of power distribution networks F de Jesús Leal-Romo, JE Rayas-Sánchez, J He 2017 IEEE 8th Latin American Symposium on Circuits & Systems (LASCAS), 1-4	4	2017
Systematic configuration of coarsely discretized 3D EM solvers for reliable and fast simulation of high-frequency planar structures JE Rayas-Sánchez, Z Brito-Brito, JC Cervantes-González, CA López 2013 IEEE 4th Latin American Symposium on Circuits and Systems (LASCAS), 1-4	4	2013
EM-based design optimization of microstrip lines traversing a rectangular gap in the reference plane JE Rayas-Sánchez, E Estrada-Arámbula 2012 International Conference on Synthesis, Modeling, Analysis and ...	4	2012
Broadband physics-based modeling of microwave passive devices through frequency mapping JW Bandler, MA Ismail, JE Rayas-Sánchez International Journal of RF and Microwave Computer-Aided Engineering: Co ...	4	2001
TC-2 Design Automation Committee—On the Future of RF and Microwave Design Automation—2022 GP Gibiino, JE Rayas-Sánchez, M Pirola, R Khazaka, QJ Zhang, DE Root, ... IEEE Microwave Magazine 23 (11), 104-105	3	2022
Optimizing phase settings of high-frequency voltage regulators for power delivery applications F de Jesús Leal-Romo, JL Silva-Perales, C López-Limón, ... 2018 IEEE 22nd Workshop on Signal and Power Integrity (SPI), 1-4	3	2018
Enhanced procedure to setup the simulation bounding box and the meshing scheme of a 3D finite element EM simulator for planar microwave	3	2015

TÍTULO	CITADO POR	AÑO
structures Z Brito-Brito, JE Rayas-Sánchez, JL Chávez-Hurtado 2015 IEEE MTT-S International Microwave Symposium, 1-3		
Reliable full-wave EM simulation of a single-layer SIW interconnect with transitions to microstrip lines JL Chavez-Hurtado, JE Rayas-Sánchez, Z Brito-Brito COMSOL Conf, 1-5	3	2014
Research activities on computer-aided modeling, design and optimization of RF and microwave circuits at ITESO Mexico JE Rayas-Sánchez, Z Brito-Brito 2014 IEEE MTT-S International Microwave Symposium (IMS2014), 1-3	3	2014
HFSS automated driver based on non-GUI scripting for EM-based design of high-frequency circuits F Leal-Romo, R Moreyra-González, JE Rayas-Sánchez 2012 IEEE 3rd Latin American Symposium on Circuits and Systems (LASCAS), 1-4	3	2012
SMX-a novel object-oriented optimization system MH Bakr, JW Bandler, QS Cheng, MA Ismail, JE Rayas-Sánchez 2001 IEEE MTT-S International Microwave Symposium Digest (Cat. No. 01CH37157 ...	3	2001
Interconnect crosstalk minimization: an alternative route JW Bandler, JE Rayas-Sánchez Simulation Optimization Systems Research Laboratory, McMaster University ...	3	1998
An early history of optimization technology for automated design of microwave circuits JW Bandler, JE Rayas-Sánchez IEEE Journal of Microwaves 3 (1), 319-337	2	2022
Space Mapping: A Retrospective and its Application to Design Optimization of Nonlinear RF and Microwave Circuits JE Rayas-Sánchez, JW Bandler 2022 52nd European Microwave Conference (EuMC), 12-15	2	2022
System-level measurement-based design optimization by space mapping technology JE Rayas-Sánchez, JW Bandler 2022 IEEE/MTT-S International Microwave Symposium-IMS 2022, 118-120	2	2022
Fast jitter tolerance testing for high-speed serial links in post-silicon validation A Viveros-Wacher, R Baca-Baylón, FE Rangel-Patiño, JL Silva-Cortés, ... IEEE Transactions on Electromagnetic Compatibility 64 (2), 516-523	2	2021
Transmitter and receiver equalizers optimization for PCI Express Gen6. 0 based on PAM4 RJ Ruiz-Urbina, FE Rangel-Patiño, JE Rayas-Sánchez, EA Vega-Ochoa, ... 2020 IEEE MTT-S Latin America Microwave Conference (LAMC 2020), 1-4	2	2021

TÍTULO	CITADO POR	AÑO
<p>Towards signal-power integrity analysis by efficient power delivery network lumped models obtained from parameter extraction</p> <p>B Mercado-Casillas, JE Rayas-Sánchez 2019 IEEE 28th Conference on Electrical Performance of Electronic Packaging ...</p>	2	2019
<p>EM Parametric Study of Length Matching Elements Exploiting an ANSYS HFSS Matlab-Python Driver</p> <p>RJ Sánchez-Mesa, DM Cortés-Hernández, JE Rayas-Sánchez, ... 2018 IEEE MTT-S Latin America Microwave Conference (LAMC 2018), 1-3</p>	2	2018
<p>A Novel High-Performance Length Matching Element for High-Speed Interconnect Differential Channels</p> <p>RJ Sánchez-Mesa, DM Cortés-Hernández, B Gálvez-Sahagún, ... 2018 IEEE MTT-S Latin America Microwave Conference (LAMC 2018), 1-3</p>	2	2018
<p>Industry-oriented research projects on computer-aided design of high-frequency circuits and systems at ITESO Mexico</p> <p>JE Rayas-Sánchez, FE Rangel-Patiño, A Viveros-Wacher, ... European Microwave Conference (EuMC-2018), 588-591</p>	2	2018
<p>A historical account and technical reassessment of the Broyden-based input space mapping optimization algorithm</p> <p>JE Rayas-Sánchez 2017 IEEE MTT-S International Microwave Symposium (IMS), 1495-1497</p>	2	2017
<p>Analysis of the implications of stacked devices in nano-scale technologies for analog applications</p> <p>I Lomelí-Illescas, SA Solís-Bustos, JE Rayas-Sánchez 2017 18th IEEE Latin American Test Symposium (LATS), 1-4</p>	2	2017
<p>Optimization of the stub-alternated and serpentine microstrip structures to minimize far-end crosstalk</p> <p>D Becerra-Pérez, JE Rayas-Sánchez 2012 IEEE 21st Conference on Electrical Performance of Electronic Packaging ...</p>	2	2012
<p>Design of reusable CMOS OTAs using CAD tools</p> <p>JL Chávez-Hurtado, E Martínez-Guerrero, JE Rayas-Sánchez 2009 52nd IEEE International Midwest Symposium on Circuits and Systems, 228-231</p>	2	2009
<p>Design of a CMOS second order band-pass continuous time filter using numerical optimization</p> <p>LN Perez-Acosta, JE Rayas-Sanchez 2009 52nd IEEE International Midwest Symposium on Circuits and Systems, 204-207</p>	2	2009
<p>Diseno de circuitos de alta frecuencia usando mapeo espacial neural con no linealidad regulada</p> <p>V Gutiérrez-Ayala, JE Rayas-Sánchez XII International Workshop Iberchip (IWS2006), San Jose, Costa Rica, 150-153</p>	2	2006
<p>Yield-driven EM optimization using space mapping-based neuromodels</p> <p>JW Bandler, JE Rayas-Sanchez, QJ Zhang 2001 31st European Microwave Conference, 1-4</p>	2	2001

TÍTULO	CITADO POR	AÑO
<p>An overview of RF and microwave research in Latin America: Scanning Latin American research on microwaves JE Rayas-Sánchez, JA Reynoso-Hernández IEEE Microwave Magazine 24 (5), 45-57</p>	1	2023
<p>EM-driven tolerance optimization of compact microwave components using response feature surrogates A Pietrenko-Dabrowska, S Koziel, JW Bandler, JE Rayas-Sanchez 2022 IEEE/MTT-S International Microwave Symposium-IMS 2022, 107-110</p>	1	2022
<p>Frequency-and time-domain yield optimization of a power delivery network subject to large decoupling capacitor tolerances AE Moreno-Mojica, JE Rayas-Sánchez IEEE Transactions on Computer-Aided Design of Integrated Circuits and ...</p>	1	2022
<p>The Second IEEE MTT-S Latin America Microwave Conference G Rafael Valdivia IEEE Microwave Theory and Techniques Society</p>	1	2020
<p>Applications of Broyden-based input space mapping to modeling and design optimization in high-tech companies in Mexico JE Rayas-Sánchez, Z Brito-Brito 2019 49th European Microwave Conference (EuMC), 272-275</p>	1	2019

7. Apéndice B: Reporte de citas de *Web of Science* (Citas Tipo A)



Jose Ernesto Rayas-Sanchez

<https://www.webofscience.com/wos/author/rid/F-8836-2010>

Web of Science ResearcherID: F-8836-2010

ORCID: 0000-0003-2611-5618

Publication Metrics

For manuscripts published from date range January 1998 - August 2023

16

H-index

103

Total Publications

1

Sum of Times Cited by Patents

1335

Sum of Times Cited

91

Web of Science Core Collection Publications

For all time

16

H-index

105

Total Publications

1

Sum of Times Cited by Patents

1335

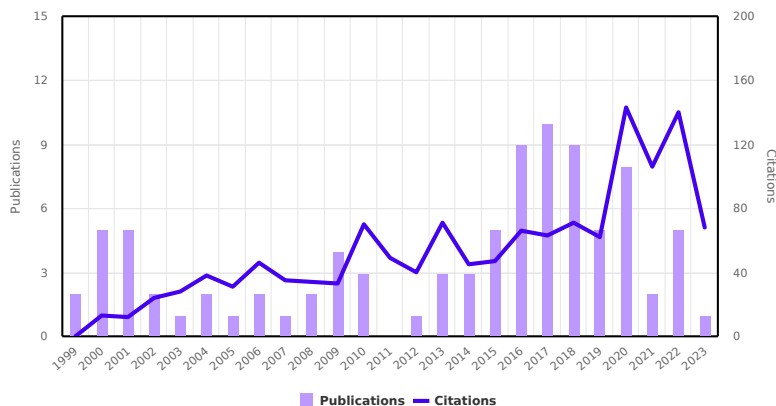
Sum of Times Cited

91

Web of Science Core Collection Publications

Publication Impact Over Time

Times Cited and Publications Over Time



Publishing Summary

For manuscripts published from date range January 1998 - August 2023

- | | |
|--|--|
| (22) IEEE MTT-S International Microw... | (10) IEEE Transactions on Microwave... |
| (7) IEEE Microwave Magazine | (7) IEEE MTT-S Latin America Microw... |
| (6) International Journal of RF and M... | (5) IEEE Latin American Symposium ... |
| (4) IEEE Conference on Electrical Pe... | (4) 46TH EUROPEAN MICROWAVE C... |
| (3) IEEE International Midwest Symp... | (3) International Caribbean Confere... |
| (3) IEEE MTT-S International Confere... | (2) European Microwave Conference |
| (2) IEEE Transactions on Computer-... | (2) IEEE Journal of Microwaves |
| (2) IEEE Transactions on Electromag... | (2) Ieee Mtt-s Latin America Microwa... |
| (1) Microwave and Optical Technolo... | (1) International Journal of Numeric... |
| (1) Electronics, Robotics and Autom... | (1) International Microwave Worksh... |
| (1) Ieee Andescon | (1) IEEE Latin American Test Sympos... |
| (1) Microelectronics Reliability | (1) IEEE Transactions on Circuits and... |
| (1) 16TH LATIN-AMERICAN TEST SY... | (1) SBMO/IEEE MTT-S International M... |
| (1) Simulation-driven Design Optimi... | (1) IEEE Transactions on Emerging T... |
| (1) International Conference on Syn... | (1) International Microwave Worksh... |
| (1) IEEE International Test Conferen... | (1) IEEE Latin-American Test Sympo... |
| (1) Integration, the VLSI Journal | (1) 17TH IEEE WORKSHOP ON SIGNA... |
| (1) European Microwave Conference... | |

Publications

EM-based optimization of microwave circuits using artificial neural networks: The state-of-the-art Published: Jan 2004 in IEEE Transactions on Microwave Theory and Techniques DOI: 10.1109/TMTT.2003.820897 Web of Science accession number: WOS:000188651400018	267
Neuromodeling of microwave circuits exploiting space-mapping technology Published: Dec 1999 in IEEE Transactions on Microwave Theory and Techniques DOI: 10.1109/22.808989 Web of Science accession number: WOS:000084204800034	154
EM-based Monte Carlo analysis and yield prediction of microwave circuits using linear-input neural-output space mapping Published: 2006 in IEEE Transactions on Microwave Theory and Techniques DOI: 10.1109/TMTT.2006.885902 Web of Science accession number: WOS:000242949000029	121
Power in Simplicity with ASM Published: 2016 in IEEE Microwave Magazine DOI: 10.1109/MMM.2015.2514188 Web of Science accession number: WOS:000372418400016	84
Neural space-mapping optimization for EM-based design Published: 2000 in IEEE Transactions on Microwave Theory and Techniques DOI: 10.1109/22.898979 Web of Science accession number: WOS:000166709500015	79
Polynomial-Based Surrogate Modeling of RF and Microwave Circuits in Frequency Domain Exploiting the Multinomial Theorem Published: 2016 in IEEE Transactions on Microwave Theory and Techniques DOI: 10.1109/TMTT.2016.2623902 Web of Science accession number: WOS:000390649000005	65
A generalized space-mapping tableau approach to device modeling Published: 2001 in IEEE Transactions on Microwave Theory and Techniques DOI: 10.1109/22.899963 Web of Science accession number: WOS:000166732500010	64
A General EM-Based Design Procedure for Single-Layer Substrate Integrated Waveguide Interconnects with Microstrip Transitions Published: Jun 2008 in IEEE MTT-S International Microwave Symposium DOI: 10.1109/MWSYM.2008.4632999 Web of Science accession number: WOS:000262480000312	62

<p>Space-mapping optimization of microwave circuits exploiting surrogate models</p> <p>Published: 2000 in IEEE Transactions on Microwave Theory and Techniques DOI: 10.1109/22.898978 Web of Science accession number: WOS:000166709500014</p>	45
<p>A linear inverse space-mapping (LISM) algorithm to design linear and nonlinear RF and microwave circuits</p> <p>Published: 2005 in IEEE Transactions on Microwave Theory and Techniques DOI: 10.1109/TMTT.2004.842482 Web of Science accession number: WOS:000227485000021</p>	41
<p>Yield-driven electromagnetic optimization via space mapping-based neuromodels</p> <p>Published: 2002 in International Journal of RF and Microwave Computer-Aided Engineering DOI: 10.1002/MMCE.10015 Web of Science accession number: WOS:000172705500007</p>	39
<p>Advanced RF and microwave design optimization: a journey and a vision of future trends</p> <p>Published: Jan 2021 in IEEE Journal of Microwaves DOI: 10.1109/JMW.2020.3034263 Web of Science accession number: INSPEC:20369054</p>	34
<p>Neural inverse space mapping (NISM) optimization for EM-based microwave design</p> <p>Published: Feb 2003 in International Journal of RF and Microwave Computer-Aided Engineering DOI: 10.1002/MMCE.10067 Web of Science accession number: WOS:000181569400005</p>	29
<p>Space Mapping Optimization of Handset Antennas Considering EM Effects of Mobile Phone Components and Human Body</p> <p>Published: 2016 in International Journal of RF and Microwave Computer-Aided Engineering DOI: 10.1002/MMCE.20945 Web of Science accession number: WOS:000372986800003</p>	28
<p>EM-based statistical analysis and yield estimation using linear-input and neural-output space mapping</p> <p>Published: Jun 2006 in IEEE MTT-S International Microwave Symposium DOI: 10.1109/MWSYM.2006.249641 Web of Science accession number: WOS:000244379003082</p>	26
<p>Neural input space mapping optimization based on nonlinear two-layer perceptrons with optimized nonlinearity</p> <p>Published: Jul 2010 in International Journal of RF and Microwave Computer-Aided Engineering DOI: 10.1002/MMCE.20457 Web of Science accession number: WOS:000281213900005</p>	20

<p>Expanded space-mapping EM-based design framework exploiting preassigned parameters</p> <p>Published: Dec 2002 in IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications</p> <p>DOI: 10.1109/TCSI.2002.805716</p> <p>Web of Science accession number: WOS:000180273100018</p>	20
<p>System Margining Surrogate-Based Optimization in Post-Silicon Validation</p> <p>Published: 2017 in IEEE Transactions on Microwave Theory and Techniques</p> <p>DOI: 10.1109/TMTT.2017.2701368</p> <p>Web of Science accession number: WOS:000409542000004</p>	14
<p>Analog Gross Fault Identification in RF Circuits Using Neural Models and Constrained Parameter Extraction</p> <p>Published: Jun 2019 in IEEE Transactions on Microwave Theory and Techniques</p> <p>DOI: 10.1109/TMTT.2019.2914106</p> <p>Web of Science accession number: WOS:000470969100005</p>	12
<p>Space mapping optimization of microwave circuits exploiting surrogate models</p> <p>Published: 2000 in IEEE MTT-S International Microwave Symposium</p> <p>DOI: 10.1109/MWSYM.2000.862325</p> <p>Web of Science accession number: WOS:000166811000417</p>	12
<p>Tuning-aided implicit space mapping</p> <p>Published: Sep 2008 in International Journal of RF and Microwave Computer-Aided Engineering</p> <p>DOI: 10.1002/MMCE.20303</p> <p>Web of Science accession number: WOS:000258856800007</p>	11
<p>EM-Based Optimization of a Single Layer SIW with Microstrip Transitions using Linear Output Space Mapping</p> <p>Published: Jun 2009 in IEEE MTT-S International Microwave Symposium</p> <p>DOI: 10.1109/MWSYM.2009.5165749</p> <p>Web of Science accession number: WOS:000273507400133</p>	10
<p>Neuromodeling of microwave circuits exploiting space mapping technology</p> <p>Published: 1999 in IEEE MTT-S International Microwave Symposium</p> <p>DOI: 10.1109/MWSYM.1999.779445</p> <p>Web of Science accession number: WOS:000081428500034</p>	10
<p>Surrogate-Based Analysis and Design Optimization of Power Delivery Networks</p> <p>Published: Dec 2020 in IEEE Transactions on Electromagnetic Compatibility</p> <p>DOI: 10.1109/TEMC.2020.2973946</p> <p>Web of Science accession number: WOS:000599506500022</p>	9

<p>Surrogate modeling of microwave circuits using polynomial functional interpolants</p> <p>Published: May 2010 in IEEE MTT-S International Microwave Symposium</p> <p>DOI: 10.1109/MWSYM.2010.5516727</p> <p>Web of Science accession number: WOS:000288196500052</p>	9
<p>Neural inverse space mapping EM-optimization</p> <p>Published: 2001 in IEEE MTT-S International Microwave Symposium</p> <p>DOI: 10.1109/MWSYM.2001.967062</p> <p>Web of Science accession number: WOS:000175125500234</p>	9
<p>A Holistic Formulation for System Margining and Jitter Tolerance Optimization in Industrial Post-Silicon Validation</p> <p>Published: Apr 2020 in IEEE Transactions on Emerging Topics in Computing</p> <p>DOI: 10.1109/TETC.2017.2757937</p> <p>Web of Science accession number: WOS:000542970200018</p>	8
<p>Application of the NARX neural network as a digital predistortion technique for linearizing microwave power amplifiers</p> <p>Published: 2015 in Microwave and Optical Technology Letters</p> <p>DOI: 10.1002/MOP.29281</p> <p>Web of Science accession number: WOS:000357014300035</p>	8
<p>A frequency-domain approach to interconnect crosstalk simulation and minimization</p> <p>Published: Apr 2004 in Microelectronics Reliability</p> <p>DOI: 10.1016/J.MICROREL.2003.10.013</p> <p>Web of Science accession number: WOS:000220536200016</p>	8
<p>Neural space mapping EM optimization of microwave structures</p> <p>Published: 2000 in IEEE MTT-S International Microwave Symposium</p> <p>DOI: 10.1109/MWSYM.2000.863320</p> <p>Web of Science accession number: WOS:000166811000204</p>	8
<p>Optimization of full-wave EM models by low-order low-dimension polynomial surrogate functionals</p> <p>Published: May 2017 in International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</p> <p>DOI: 10.1002/JNM.2094</p> <p>Web of Science accession number: WOS:000399386200007</p>	7
<p>EM-based space mapping optimization of left-handed coplanar waveguide filters with split ring resonators</p> <p>Published: Jun 2007 in IEEE MTT-S International Microwave Symposium</p> <p>DOI: 10.1109/MWSYM.2007.380267</p> <p>Web of Science accession number: WOS:000250827400026</p>	7

<p>Post-Silicon Receiver Equalization Metamodeling by Artificial Neural Networks Published: Apr 2019 in IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems DOI: 10.1109/TCAD.2018.2834403 Web of Science accession number: WOS:000462370000012</p>	6
<p>Expanded space mapping design framework exploiting preassigned parameters Published: 2001 in IEEE MTT-S International Microwave Symposium DOI: 10.1109/MWSYM.2001.967095 Web of Science accession number: WOS:000175125500267</p>	5
<p>Reconfigurable FIR Filter Coefficient Optimization in Post-Silicon Validation to Improve Eye Diagram for Optical Interconnects Published: 2017 in International Caribbean Conference on Devices, Circuits and Systems (ICCDCS) DOI: 10.1109/ICCDCS.2017.7959697 Web of Science accession number: WOS:000405186200018</p>	4
<p>R&D in Latin America Published: 2014 in IEEE Microwave Magazine DOI: 10.1109/MMM.2014.2302660 Web of Science accession number: WOS:000334520300019</p>	4
<p>Machine Learning Techniques and Space Mapping Approaches to Enhance Signal and Power Integrity in High-Speed Links and Power Delivery Networks Published: 2020 in IEEE Latin American Symposium on Circuits and Systems (LASCAS) Web of Science accession number: WOS:000926125300045</p>	3
<p>A programmable CMOS voltage controlled ring oscillator for radio-frequency diathermy on-chip circuit Published: Jun 2017 in International Caribbean Conference on Devices, Circuits and Systems (ICCDCS) DOI: 10.1109/ICCDCS.2017.7959721 Web of Science accession number: WOS:000405186200013</p>	3
<p>A Digital Predistortion Technique Based on a NARX Network to Linearize GaN Class F Power Amplifiers Published: Aug 2014 in IEEE International Midwest Symposium on Circuits and Systems (MWSCAS) DOI: 10.1109/MWSCAS.2014.6908515 Web of Science accession number: WOS:000350205800179</p>	3
<p>Fast Jitter Tolerance Testing for High-Speed Serial Links in Post-Silicon Validation Published: Apr 2022 in IEEE Transactions on Electromagnetic Compatibility DOI: 10.1109/TEMC.2021.3122348 Web of Science accession number: WOS:000732635100001</p>	2

<p>Synthesis tool for automatic layout generation of analog structures Published: Oct 2016 in Ieee Andescon DOI: 10.1109/ANDESCON.2016.7836218 Web of Science accession number: WOS:000401925100031</p>	2
<p>A Holistic Methodology for System Margining and Jitter Tolerance Optimization in Post-Silicon Validation Published: 2016 in IEEE MTT-S Latin America Microwave Conference (LAMC) DOI: 10.1109/LAMC.2016.7851268 Web of Science accession number: WOS:000405713100029</p>	2
<p>MTT-S Mexico Trip: Addressing the RF and Microwave Community in Mexico Published: 2015 in IEEE Microwave Magazine DOI: 10.1109/MMM.2015.2431240 Web of Science accession number: WOS:000357900000011</p>	2
<p>Frequency- and Time-Domain Yield Optimization of a Power Delivery Network Subject to Large Decoupling Capacitor Tolerances Published: Dec 2022 in IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems DOI: 10.1109/TCAD.2022.3163673 Web of Science accession number: WOS:000906580100037</p>	1
<p>System-Level Measurement-Based Design Optimization by Space Mapping Technology Published: 2022 in IEEE MTT-S International Microwave Symposium DOI: 10.1109/IMS37962.2022.9865412 Web of Science accession number: WOS:000862782300031</p>	1
<p>The Second IEEE MTT-S Latin America Microwave Conference Published: Jan 2020 in IEEE Microwave Magazine DOI: 10.1109/MMM.2019.2945217 Web of Science accession number: WOS:000501782000012</p>	1
<p>Applications of Broyden-based Input Space Mapping to Modeling and Design Optimization in High-Tech Companies in Mexico Published: Oct 2019 in 46TH EUROPEAN MICROWAVE CONFERENCE (EUMC) DOI: 10.23919/EUMC.2019.8910799 Web of Science accession number: WOS:000520507700067</p>	1
<p>Jitter Tolerance Acceleration Using the Golden Section Optimization Technique Published: Feb 2018 in IEEE Latin American Symposium on Circuits and Systems (LASCAS) DOI: 10.1109/LASCAS.2018.8399908 Web of Science accession number: WOS:000439988400057</p>	1

<p>A historical account and technical reassessment of the Broyden-based input space mapping optimization algorithm Published: Jun 2017 in IEEE MTT-S International Microwave Symposium DOI: 10.1109/MWSYM.2017.8058906 Web of Science accession number: WOS:000425241500401</p>	1
<p>Design Optimization of a Planar Spiral Inductor Using Space Mapping Published: 2017 in IEEE Conference on Electrical Performance of Electronic Packaging and Systems (EPEPS) Web of Science accession number: WOS:000452142300009</p>	1
<p>The First IEEE MTT-S Latin America Microwave Conference Published: 2017 in IEEE Microwave Magazine DOI: 10.1109/MMM.2017.2712067 Web of Science accession number: WOS:000407501900014</p>	1
<p>Polynomial-based surrogate modeling of microwave structures in frequency domain exploiting the multinomial theorem Published: May 2016 in IEEE MTT-S International Microwave Symposium DOI: 10.1109/MWSYM.2016.7540398 Web of Science accession number: WOS:000390313200457</p>	1
<p>Research Activities on Computer-Aided Modeling, Design and Optimization of RF and Microwave Circuits at ITESO Mexico Published: Jun 2014 in IEEE MTT-S International Microwave Symposium DOI: 10.1109/MWSYM.2014.6848342 Web of Science accession number: WOS:000363283700103</p>	1
<p>Optimization of the Stub-alternated and Serpentine Microstrip Structures to Minimize Far-End Crosstalk Published: Oct 2012 in IEEE Conference on Electrical Performance of Electronic Packaging and Systems (EPEPS) DOI: 10.1109/EPEPS.2012.6457854 Web of Science accession number: WOS:000323212000025</p>	1
<p>SMX - A novel object-oriented optimization system Published: 2001 in IEEE MTT-S International Microwave Symposium Web of Science accession number: WOS:000175125500488</p>	1
<p>Broadband physics-based modeling of microwave passive devices through frequency mapping Published: 2001 in International Journal of RF and Microwave Computer-Aided Engineering DOI: 10.1002/MMCE.1017 Web of Science accession number: WOS:000168401800008</p>	1
<p>An Overview of RF and Microwave Research in Latin America: Scanning Latin American Research on Microwaves Published: May 2023 in IEEE Microwave Magazine DOI: 10.1109/MMM.2023.3242559 Web of Science accession number: WOS:000981712500009</p>	0

<p>An Early History of Optimization Technology for Automated Design of Microwave Circuits</p> <p>Published: 2023 in IEEE Journal of Microwaves</p> <p>DOI: 10.1109/JMW.2022.3225012</p> <p>Web of Science accession number: INSPEC:22476835</p>	0
<p>The MTT-S Education Committee-Promoting Education for All-2022</p> <p>Published: Nov 2022 in IEEE Microwave Magazine</p> <p>DOI: 10.1109/MMM.2022.3195601</p> <p>Web of Science accession number: WOS:000864182100023</p>	0
<p>EM-Driven Tolerance Optimization of Compact Microwave Components Using Response Feature Surrogates</p> <p>Published: 2022 in IEEE MTT-S International Microwave Symposium</p> <p>DOI: 10.1109/IMS37962.2022.9865578</p> <p>Web of Science accession number: WOS:000862782300028</p>	0
<p>Transmitter and Receiver Equalizers Optimization for PCI Express Gen6.0 based on PAM4</p> <p>Published: 2021 in IEEE Mtt-s Latin America Microwave Conference (Iamc-)</p> <p>Web of Science accession number: WOS:000905037700011</p>	0
<p>Optimizing a Buck Voltage Regulator and the Number of Decoupling Capacitors for a PDN Application</p> <p>Published: 2021 in IEEE Mtt-s Latin America Microwave Conference (Iamc-)</p> <p>Web of Science accession number: WOS:000905037700005</p>	0
<p>Power Delivery Network Impedance Profile and Voltage Droop Optimization</p> <p>Published: 2020 in 46TH EUROPEAN MICROWAVE CONFERENCE (EUMC)</p> <p>Web of Science accession number: WOS:000656518200071</p>	0
<p>Power Delivery Network Impedance Profile and Voltage Droop Optimization</p> <p>Published: 2020 in 46TH EUROPEAN MICROWAVE CONFERENCE (EUMC)</p> <p>Web of Science accession number: WOS:000656518200718</p>	0
<p>Power Delivery Network Impedance Profile and Voltage Droop Optimization</p> <p>Published: 2020 in 46TH EUROPEAN MICROWAVE CONFERENCE (EUMC)</p> <p>Web of Science accession number: WOS:000656518200396</p>	0
<p>An Objective Function Formulation for Circuit Parameter Extraction Based on the Kullback-Leibler Distance</p> <p>Published: 2020 in IEEE MTT-S International Microwave Symposium</p> <p>Web of Science accession number: WOS:000627746500358</p>	0
<p>A tool for the automatic generation and analysis of regular analog layout modules</p> <p>Published: Mar 2019 in Integration, the VLSI Journal</p> <p>DOI: 10.1016/J.VLSI.2018.11.005</p> <p>Web of Science accession number: WOS:000474316700007</p>	0

<p>Towards Signal-Power Integrity Analysis by Efficient Power Delivery Network Lumped Models Obtained From Parameter Extraction Published: 2019 in IEEE Conference on Electrical Performance of Electronic Packaging and Systems (EPEPS) Web of Science accession number: WOS:000570016200034</p>	0
<p>A Novel High-Performance Length Matching Element for High-Speed Interconnect Differential Channels Published: Dec 2018 in IEEE MTT-S Latin America Microwave Conference (LAMC) DOI: 10.1109/LAMC.2018.8699027 Web of Science accession number: WOS:000518835200019</p>	0
<p>EM Parametric Study of Length Matching Elements Exploiting an ANSYS HFSS Matlab-Python Driver Published: Dec 2018 in IEEE MTT-S Latin America Microwave Conference (LAMC) DOI: 10.1109/LAMC.2018.8699050 Web of Science accession number: WOS:000518835200040</p>	0
<p>Transmitter and Receiver Equalizers Optimization Methodologies for High-Speed Links in Industrial Computer Platforms Post-Silicon Validation Published: Oct 2018 in IEEE International Test Conference (TC) DOI: 10.1109/TEST.2018.8624794 Web of Science accession number: WOS:000465124200030</p>	0
<p>Optimizing Phase Settings of High-Frequency Voltage Regulators for Power Delivery Applications Published: 2018 in 17TH IEEE WORKSHOP ON SIGNAL AND POWER INTEGRITY (SPI) Web of Science accession number: WOS:000587595100015</p>	0
<p>High-Speed Links Receiver Optimization in Post-Silicon Validation Exploiting Broyden-based Input Space Mapping Published: 2018 in IEEE MTT-S International Conference on Numerical Electromagnetic and Multiphysics Modeling and Optimization (NEMO) Web of Science accession number: WOS:000591822200010</p>	0
<p>Selecting Surrogate-Based Modeling Techniques for Power Integrity Analysis Published: 2018 in IEEE MTT-S Latin America Microwave Conference (LAMC) Web of Science accession number: WOS:000518835200013</p>	0
<p>Analog Fault Identification in RF Circuits using Artificial Neural Networks and Constrained Parameter Extraction Published: 2018 in IEEE MTT-S International Conference on Numerical Electromagnetic and Multiphysics Modeling and Optimization (NEMO) Web of Science accession number: WOS:000591822200018</p>	0

<p>Direct Optimization of a PCI Express Link Equalization in Industrial Post-Silicon Validation</p> <p>Published: 2018 in IEEE Latin-American Test Symposium (LATS)</p> <p>Web of Science accession number: WOS:000925990000006</p>	0
<p>Design and validation of a portable radio-frequency diathermy prototype</p> <p>Published: Jun 2017 in International Caribbean Conference on Devices, Circuits and Systems (ICCDCS)</p> <p>DOI: 10.1109/ICCDCS.2017.7959710</p> <p>Web of Science accession number: WOS:000405186200020</p>	0
<p>Analysis of the implications of stacked devices in nano-scale technologies for analog applications</p> <p>Published: Mar 2017 in IEEE Latin American Test Symposium (LATS)</p> <p>DOI: 10.1109/LATW.2017.7906750</p> <p>Web of Science accession number: WOS:000403394700014</p>	0
<p>Design of Experiments Implementation towards Optimization of Power Distribution Networks</p> <p>Published: Feb 2017 in IEEE Latin American Symposium on Circuits and Systems (LASCAS)</p> <p>DOI: 10.1109/LASCAS.2017.7948102</p> <p>Web of Science accession number: WOS:000411741200064</p>	0
<p>Multiphysics Polynomial-Based Surrogate Modeling of Microwave Structures in Frequency Domain</p> <p>Published: Dec 2016 in IEEE MTT-S Latin America Microwave Conference (LAMC)</p> <p>DOI: 10.1109/LAMC.2016.7851279</p> <p>Web of Science accession number: WOS:000405713100040</p>	0
<p>Temperature Effects in Automotive-Grade High Speed Interconnects</p> <p>Published: Dec 2016 in IEEE MTT-S Latin America Microwave Conference (LAMC)</p> <p>DOI: 10.1109/LAMC.2016.7851273</p> <p>Web of Science accession number: WOS:000405713100034</p>	0
<p>Eye Diagram Optimization based on Design of Experiments (DoE) to Accelerate Industrial Testing of High Speed Links</p> <p>Published: Dec 2016 in IEEE MTT-S Latin America Microwave Conference (LAMC)</p> <p>DOI: 10.1109/LAMC.2016.7851249</p> <p>Web of Science accession number: WOS:000405713100010</p>	0
<p>Enhanced Formulation for Polynomial-Based Surrogate Modeling of Microwave Structures in Frequency Domain</p> <p>Published: Aug 2015 in IEEE MTT-S International Conference on Numerical Electromagnetic and Multiphysics Modeling and Optimization (NEMO)</p> <p>DOI: 10.1109/NEMO.2015.7415094</p> <p>Web of Science accession number: WOS:000380464100103</p>	0

<p>Enhanced Procedure to Setup the Simulation Bounding Box and the Meshing Scheme of a 3D Finite Element EM Simulator for Planar Microwave Structures Published: May 2015 in IEEE MTT-S International Microwave Symposium DOI: 10.1109/MWSYM.2015.7166960 Web of Science accession number: WOS:000370722900257</p>	0
<p>Impedance Matching Analysis and EMC Validation of a Low-Cost PCB Differential Interconnect Published: Mar 2015 in 16TH LATIN-AMERICAN TEST SYMPOSIUM (LATS) DOI: 10.1109/LATW.2015.7102514 Web of Science accession number: WOS:000380400700034</p>	0
<p>Return-Loss Minimization of Package Interconnects through Input Space Mapping using FEM-based Models Published: Aug 2013 in SBMO/IEEE MTT-S International Microwave and Optoelectronics Conference Proceedings DOI: 10.1109/IMOC.2013.6646607 Web of Science accession number: WOS:000359376200188</p>	0
<p>Systematic Configuration of Coarsely Discretized 3D EM Solvers for Reliable and Fast Simulation of High-Frequency Planar Structures Published: Feb 2013 in IEEE Latin American Symposium on Circuits and Systems (LASCAS) DOI: 10.1109/LASCAS.2013.6519093 Web of Science accession number: WOS:000324855900113</p>	0
<p>Neural Space Mapping Methods for Electromagnetics-Based Yield Estimation Published: 2013 in Simulation-driven Design Optimization and Modeling for Microwave Engineering DOI: 10.1142/9781848169173_0011 Web of Science accession number: WOS:000347372000012</p>	0
<p>Impact of Base Points Distributions on the Polynomial Surrogate Modeling of a Substrate Integrated Waveguide with Microstrip Transitions Published: Sep 2010 in Electronics, Robotics and Automotive Mechanics Conference (CERMA) DOI: 10.1109/CERMA.2010.80 Web of Science accession number: WOS:000406956500120</p>	0
<p>Design of Reusable CMOS OTAs using CAD Tools Published: Aug 2009 in IEEE International Midwest Symposium on Circuits and Systems (MWSCAS) DOI: 10.1109/MWSCAS.2009.5236110 Web of Science accession number: WOS:000277574000057</p>	0
<p>Design of a CMOS Second Order Band-Pass Continuous Time Filter using Numerical Optimization Published: Aug 2009 in IEEE International Midwest Symposium on Circuits and Systems (MWSCAS) DOI: 10.1109/MWSCAS.2009.5236116 Web of Science accession number: WOS:000277574000051</p>	0

<p>An Improved EM-Based Design Procedure for Single-Layer Substrate Integrated Waveguide Interconnects with Microstrip Transitions Published: Feb 2009 in International Microwave Workshop Series on Signal Integrity and High-Speed Interconnects DOI: 10.1109/IMWS.2009.4814902 Web of Science accession number: WOS:000272026900005</p>	0
<p>Broadband physics-based modeling of microwave passive devices through frequency mapping Published: 2000 in IEEE MTT-S International Microwave Symposium Web of Science accession number: WOS:000166811000225</p>	0
<p>Basic Space Mapping: A Retrospective and its Application to Design Optimization of Nonlinear RF and Microwave Circuits Published: Sep 2022 in European Microwave Conference (EuMC) DOI: 10.23919/EUMC54642.2022.9991871</p>	Not indexed in the Web of Science
<p>EM-based design optimization of microstrip lines traversing a rectangular gap in the reference plane Published: Sep 2012 in International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design (SMACD) DOI: 10.1109/SMACD.2012.6339451</p>	Not indexed in the Web of Science
<p>On knowledge-based neural networks and neuro-space mapping Published: Jun 2012 in IEEE MTT-S International Microwave Symposium DOI: 10.1109/MWSYM.2012.6258354</p>	Not indexed in the Web of Science
<p>HFSS automated driver based on non-GUI scripting for EM-based design of high-frequency circuits Published: Feb 2012 in IEEE Latin American Symposium on Circuits and Systems (LASCAS) DOI: 10.1109/LASCAS.2012.6180324</p>	Not indexed in the Web of Science
<p>A linear regression inverse space mapping algorithm for EM-based design optimization of microwave circuits Published: Jun 2011 in IEEE MTT-S International Microwave Symposium DOI: 10.1109/MWSYM.2011.5972954</p>	Not indexed in the Web of Science
<p>Design optimization of microstrip lines with via fences through surrogate modeling based on polynomial functional interpolants Published: Oct 2010 in IEEE Conference on Electrical Performance of Electronic Packaging and Systems (EPEPS) DOI: 10.1109/EPEPS.2010.5642562</p>	Not indexed in the Web of Science
<p>Foreword Published: Feb 2009 in International Microwave Workshop Series on Signal Integrity and High-Speed Interconnects) DOI: 10.1109/IMWS.2009.4814893</p>	Not indexed in the Web of Science

Conference session

Published: Jun 2006 in IEEE MTT-S International Microwave Symposium

DOI: 10.1109/MWSYM.2006.249646

Not indexed in
the Web of
Science

Yield-Driven EM Optimization using Space Mapping-Based Neuromodels

Published: Oct 2001 in European Microwave Conference

DOI: 10.1109/EUMA.2001.338979

Not indexed in
the Web of
Science

A Generalized Space Mapping Tableau Approach to Device Modeling

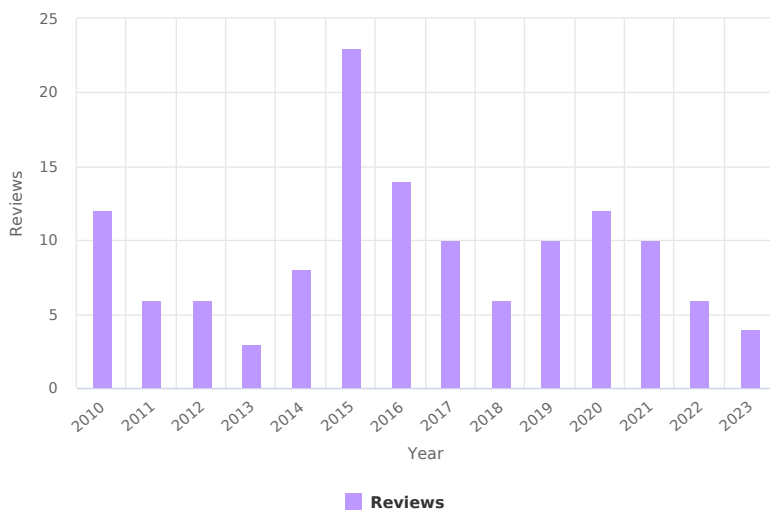
Published: Oct 1999 in European Microwave Conference

DOI: 10.1109/EUMA.1999.338480

Not indexed in
the Web of
Science

Verified reviews

Review Summary



Reviewer Summary

For manuscripts reviewed from date range January 1998 - August 2023

- | | |
|--|--|
| (41) IEEE Transactions on Microwave... | (23) International Journal of Numeri... |
| (21) IEEE Microwave and Wireless C... | (8) IEEE Transactions on Antennas a... |
| (5) IET Microwaves, Antennas and Pr... | (4) International Journal of RF and M... |
| (3) IEEE Transactions on Computer-... | (3) IEEE Journal on Multiscale and M... |
| (3) IET Science, Measurement and T... | (3) Structural and Multidisciplinary ... |
| (2) International Journal of Microwav... | (2) IEEE Journal of Microwaves |
| (2) IEEE Transactions on Emerging T... | (1) Micromachines |
| (1) IEEE Transactions on Circuits and... | (1) IEEE Microwave Magazine |
| (1) Optimization and Engineering | (1) IEEE Antennas and Wireless Prop... |
| (1) IEEE Transactions on Semicondu... | (1) International Journal of Electronics |

(1) Progress in Electromagnetics Res...

(1) IEEE International RF and Microw...

(1) IEEE International Black Sea Con...

130 REVIEWS OF 94 MANUSCRIPTS

For manuscripts published from date range January 1998 - August 2023

-
Reviewed: Jul 2023 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: May 2023 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Mar 2023 for Micromachines

-
Reviewed: Jan 2023 for IEEE Transactions on Microwave Theory and Techniques

-
2 rounds from Oct 2022 to Dec 2022 for IEEE Microwave and Wireless Components Letters

-
2 rounds from Dec 2021 to Oct 2022 for International Journal of Microwave and Wireless Technologies

-
Reviewed: Aug 2022 for IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems

-
Reviewed: Jul 2022 for IEEE Transactions on Microwave Theory and Techniques

-
3 rounds from Oct 2021 to Mar 2022 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Aug 2021 for IEEE Transactions on Microwave Theory and Techniques

-
2 rounds from Mar 2021 to Apr 2021 for IEEE Transactions on Antennas and Propagation

-
3 rounds from Dec 2020 to Apr 2021 for IEEE Journal on Multiscale and Multiphysics Computational Techniques

-
Reviewed: Apr 2021 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Mar 2021 for IEEE Transactions on Circuits and Systems II: Express Briefs

-
Reviewed: Dec 2020 for IEEE Microwave Magazine

-
2 rounds from Sep 2020 to Nov 2020 for IEEE Transactions on Antennas and Propagation

-
- 2 rounds from Sep 2020 to Oct 2020 for IEEE Journal of Microwaves

 - 2 rounds from Aug 2020 to Oct 2020 for IEEE Transactions on Microwave Theory and Techniques

 - Reviewed: Sep 2020 for IEEE Transactions on Microwave Theory and Techniques

 - Reviewed: Sep 2020 for IEEE Transactions on Microwave Theory and Techniques

 - 2 rounds from Nov 2019 to Jan 2020 for IEEE Transactions on Microwave Theory and Techniques

 - Reviewed: Jan 2020 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

 - 2 rounds from Sep 2019 to Dec 2019 for IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems

 - 2 rounds from Jun 2019 to Sep 2019 for IEEE Transactions on Microwave Theory and Techniques

 - Reviewed: Sep 2019 for IEEE Transactions on Microwave Theory and Techniques

 - 2 rounds from Feb 2019 to Jul 2019 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

 - Reviewed: Apr 2019 for IEEE Transactions on Microwave Theory and Techniques

 - Reviewed: Mar 2019 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

 - 2 rounds from Mar 2018 to Aug 2018 for IEEE Transactions on Antennas and Propagation

 - Reviewed: Jul 2018 for IEEE Transactions on Microwave Theory and Techniques

 - Reviewed: Jul 2018 for IEEE Microwave and Wireless Components Letters

 - Reviewed: May 2018 for IEEE Transactions on Microwave Theory and Techniques

 - 2 rounds from Jul 2017 to Feb 2018 for IEEE Microwave and Wireless Components Letters

 - Reviewed: Nov 2017 for IEEE Transactions on Antennas and Propagation

 - Reviewed: Jul 2017 for IEEE Transactions on Emerging Topics in Computing
-

-
Reviewed: Jun 2017 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

-
Reviewed: Jul 2016 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

-
Reviewed: Sep 2015 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

-
Reviewed: Apr 2015 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

-
Reviewed: Jan 2010 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

-
Reviewed: May 2017 for International Journal of RF and Microwave Computer-Aided Engineering

-
Reviewed: Apr 2017 for IEEE Antennas and Wireless Propagation Letters

-
Reviewed: Mar 2017 for IET Microwaves, Antennas and Propagation

-
Reviewed: Mar 2017 for IEEE Microwave and Wireless Components Letters

-
Reviewed: Jan 2017 for IET Microwaves, Antennas and Propagation

-
Reviewed: Jan 2017 for IEEE Transactions on Emerging Topics in Computing

-
2 rounds from Sep 2016 to Nov 2016 for Structural and Multidisciplinary Optimization

-
3 rounds from Feb 2016 to Sep 2016 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

-
Reviewed: Sep 2016 for Structural and Multidisciplinary Optimization

-
Reviewed: Sep 2016 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Jul 2016 for IEEE Microwave and Wireless Components Letters

-
Reviewed: Jun 2016 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Feb 2016 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Feb 2016 for International Journal of RF and Microwave Computer-Aided Engineering

-
2 rounds from Dec 2015 to Feb 2016 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Feb 2016 for IEEE Microwave and Wireless Components Letters

-
Reviewed: Dec 2015 for IEEE Transactions on Microwave Theory and Techniques

-
5 rounds from Mar 2015 to Oct 2015 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

-
2 rounds from Jul 2015 to Sep 2015 for IEEE Transactions on Microwave Theory and Techniques

-
2 rounds from May 2015 to Aug 2015 for IEEE Transactions on Microwave Theory and Techniques

-
4 rounds from Apr 2015 to Aug 2015 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

-
Reviewed: Aug 2015 for IEEE Transactions on Microwave Theory and Techniques

-
2 rounds from May 2015 to Aug 2015 for IEEE Microwave and Wireless Components Letters

-
2 rounds from May 2015 to Jun 2015 for International Journal of Numerical Modelling: Electronic Networks, Devices and Fields

-
Reviewed: Feb 2015 for IEEE Transactions on Microwave Theory and Techniques

-
2 rounds from Dec 2014 to Dec 2014 for IET Microwaves, Antennas and Propagation

-
Reviewed: Jul 2014 for IEEE Microwave and Wireless Components Letters

-
Reviewed: Apr 2014 for IEEE Microwave and Wireless Components Letters

-
Reviewed: Mar 2014 for IEEE International Black Sea Conference on Communications and Networking

-
2 rounds from Jan 2014 to Mar 2014 for IEEE Microwave and Wireless Components Letters

-
Reviewed: Mar 2014 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Dec 2013 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Nov 2013 for IEEE Microwave and Wireless Components Letters

-
Reviewed: May 2013 for IEEE Microwave and Wireless Components Letters

-
Reviewed: Dec 2012 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Nov 2012 for IEEE Transactions on Semiconductor Manufacturing

-
Reviewed: Oct 2012 for IET Science, Measurement and Technology

-
Reviewed: Sep 2012 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Jul 2012 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Apr 2012 for IEEE Transactions on Microwave Theory and Techniques

-
2 rounds from Jul 2011 to Sep 2011 for IET Science, Measurement and Technology

-
Reviewed: Jun 2011 for IEEE Transactions on Microwave Theory and Techniques

-
2 rounds from Oct 2010 to Mar 2011 for IEEE Microwave and Wireless Components Letters

-
Reviewed: Mar 2011 for Optimization and Engineering

-
Reviewed: Jan 2011 for International Journal of Electronics

-
Reviewed: Nov 2010 for IEEE Transactions on Antennas and Propagation

-
Reviewed: Sep 2010 for IEEE International RF and Microwave Conference

-
Reviewed: Aug 2010 for IEEE Microwave and Wireless Components Letters

-
2 rounds from May 2010 to Aug 2010 for IEEE Microwave and Wireless Components Letters

-
Reviewed: Aug 2010 for IEEE Transactions on Microwave Theory and Techniques

-
Reviewed: Jul 2010 for Progress in Electromagnetics Research

-
Reviewed: May 2010 for International Journal of RF and Microwave Computer-Aided Engineering

-
Reviewed: Mar 2010 for International Journal of RF and Microwave Computer-Aided Engineering

-
Reviewed: Feb 2010 for IET Microwaves, Antennas and Propagation
