DIMITRA PSYCHOGIOU, Dipl. El.-Eng, Ph.D (Dr. Sc. ETH ZURICH)
University College Cork and Tyndall National Institute, Lee Maltings, Dyke Parade, Cork, T12 R5CP, Ireland
Email: DPsychogiou@ucc.ie, dimitra.psychogiou@tyndall.ie

EDUCATION

2009 - 2013	**PhD in Electrical Engineering, ETH Zurich**, Zurich, Switzerland PhD thesis: "Waveguide-mounted RF MEMS for multifunctional RF front-ends"
2003 - 2008	**Diploma in Electrical and Computer Engineering,** University of Patras, Patras, Greece Diploma thesis: "Printed Yagi antennas for wireless communication systems"

ACADEMIC EMPLOYMENT HISTORY

11/2020-today	**Professor** School of Engineering, University College Cork, Cork, Ireland Micro & Nano Systems Centre, Tyndall National Institute, Cork, Ireland
08/2016-today	**Assistant Professor** Dept. of Electrical, Computer and Energy Engineering, University of Colorado, Boulder, USA
03/2015 – 07/2016	**Sr. Research Scientist** School of Electrical and Computer Engineering, Purdue University, USA
10/2013 – 02/2015	**Post-Doctoral Research Associate** School of Electrical and Computer Engineering, Purdue University, USA
06/2009 – 10/2013	**Research and Teaching Assistant** Laboratory for Electromagnetic Fields, ETH Zurich, Switzerland
06/2012 - 08/2012	**Research Visiting Scholar** School of Electrical and Computer Engineering, Purdue University, USA
12/2008 - 05/2009	**Research Assistant** Wireless Communication Research Group, Loughborough University, United Kingdom

PUBLICATIONS

- **Book Chapters**

[B1]. R. Gómez-García, **D. Psychogiou**, Z. Peng, J.-M. Munoz-Ferreras, **C. Li and D. Peroulis** "Adaptive RF multi-interference suppression for radar/wireless-communication wide-band receivers," Institute of Engineering and Technology (IET), Chapter 10, ISBN: 975-1-78561-357-9, 2018.

[B2]. **D. Psychogiou** and R. Gómez-García, "Acoustic-wave-lumped-element-resonator-based bandpass filters," Institute of Engineering and Technology (IET), Chapter 8, ISBN: 9781785615900, 2019.

- **Referred Journals**

[J1]. J. Estrada, S. Johannes, **D. Psychogiou** and Z. Popovic, "Tunable impedance-matching filters, IEEE Microw. Wireless Comp. Lett., accepted for publication, May 1st 2021.

[J2]. R. Gómez-García, L. Yang, J.-M. Munoz-Ferreras and **D. Psychogiou,** "Multi-band planar diplexer with sub-sets of frequency-contiguous transmission bands," **International Journal of Microwave and Wireless** Technologies, accepted for publication, April 28th 2021.

[J3]. D. J. Simpson and **D. Psychogiou,** "Frequency-dependent feeding methods for broadband vivaldi arrays with minimum half-power beamwidth (HPBW) variation IEEE Open Journal of Antennas and Propagation, accepted for publication, April 14th 2021.

[J4]. A. Ashley and **D. Psychogiou,** "RF co-designed bandpass filter/circulator (BPFC) with tunable center frequency, bandwidth, and out-of-band isolation, IEEE Microw. Wireless Comp. Lett., accepted for publication, April 8th 2021.

[J5]. A. Ashley and **D. Psychogiou,** "X-Band quasi-elliptic non-reciprocal bandpass filters (NBPFs)," IEEE Trans. Microw. Theory Techn, accepted for publication, March 12th 2021.

[J6]. D. J. Simpson and **D. Psychogiou,** "High-order and tunable balanced bandpass filters using mixed technology resonators," **International Journal of Microwave and Wireless Technologies, Vol.** 12, No. 7, pp. 609-614, September 2021.

[J7]. K. Zhao and **D. Psychogiou,** "A Monolithic vertical integration concept for compact coaxial-resonator-based bandpass filters using additive manufacturing", IEEE Microw. Wireless Comp. Lett., accepted for publication, Feb. 25th, 2021.

[J8]. R. Gómez-García, L. Yang and **D. Psychogiou,** "A frequency transformation for co-designed multi-passband/ multi-embedded-notch RF filters," **IEEE Trans. Circuits Syst.** II, Express Briefs, accepted for publication, Jan. 31st, 2021.

[J9]. R. Gómez-García, L. Yang, J.-M. Munoz-Ferreras and **D. Psychogiou,** "Adaptive multi-band negative-group-delay RF circuits with low reflection," **IEEE Trans. Circuits** Syst. I, Reg. Papers, accepted for publication, Jan. 27th, 2021.

[J10]. A. Ashley and **D. Psychogiou,** "RF Co-designed bandpass filters/isolators (BPFIs) using non-reciprocal resonant stages and microwave resonators," **IEEE Trans. Microw. Theory Techn, accepted for publication,** Nov. 30th 2020.

[J11]. L. Marzall, **D. Psychogiou** and Z. Popovic, "Microstrip ferrite circulator design with control of magnetization distribution," **IEEE Trans. Microw. Theory Techn,** Vol. 69, No. 2, pp. 1217-1226, Jan. 2021.

[J12]. **D. Psychogiou** and R. Gómez-García, "Compact substrate-integrated bandstop filters using double-resonant coaxial resonators"," **IEEE Microw. Wireless Comp. Lett.,** Vol. 30, No. 10, pp. 941-944, Jan. 2021.

[J13]. J. A. Estrada, P. De Paco Sanchez, Jose R. Montejo-Garai, **D. Psychogiou** and Z. Popovic, "Power amplifiers with frequency-selective matching n**etworks," IEEE Trans. Microw. Theory Techn,** Vol. 69, No. 1, pp. 679-708, Jan. 2021.

[J14]. R. Gómez-García, L. Yang, J.-M. Munoz-Ferreras and **D. Psychogiou,** "Avoiding RF isolators: Reflectionless microwave bandpass filtering components for advanced RF front-e**nds,"** IEEE Microwave Magazine Vol. 21, No. 12, pp. 68-86, Dec. 2020.

[J15]. **D. Psychogiou,** "Reconfigurable all-pass-to-bandstop acoustic-wave-lumped-element resonator filters", IEEE Microw. Wireless Comp. Lett., Vol. 30, No. 8, pp. 745-748, July 2020.

[J16]. W. Yang, M. A. Khater, E. J. Naglich, **D. Psychogiou** and D, Peroulis "Frequency-selective limiters using triple-mode filters," **IEEE Access,** accepted for publication June 2nd 2020.

[J17]. A. Ashley, D. J. Simpson and **D. Psychogiou,** "Quasi-elliptic dual-band bandpass filters based on series-cascaded multi-resonant cells," International Journal of Microwave and Wireless Technologies, Vol. 12, No. 7, pp. 609-614, September 2020.

[J18]. **D. Psychogiou** and M. Deng, "High-order coaxial bandpass filters with multiple levels of transfer function tunability," **IEEE Microw. Wireless Comp. Lett.,** Vol. 30, No. 4, pp. 367-370, February 2020.

[J19]. **D. Psychogiou** and K. Sadasivan, "**Tunable coaxial cavity resonator**-based filters using actuated liquid **metal posts,"** IEEE Microw. Wireless Comp. Lett., Vol. 29, No. 12, pp. 763-766, December 2019.

[J20]. R. Gómez-García, L. Yang, J.-M. Munoz-Ferreras and **D. Psychogiou, "Single/** multi-band coupled-multi-**line filtering section and its application to RF diplexers, bandpass/bandstop filters, and filtering couplers,"** IEEE Trans. Microw. Theory Techn., Vol. 67, No. 10, pp. 3959-3972, October 2019. (***8th most popular published paper in 2019***)

[J21]. R. Gómez-García, J.-M. Munoz-Ferreras and **D. Psychogiou,** "High-order input-r**eflectionless** bandpass/bandstop filters and multiplexers," IEEE Trans. Microw. Theory Techn., Vol. 67, No. 9, pp. 3683-3695, September 2019.

[J22]. **D. Psychogiou** and R. Gómez-García, "**Symmetrical** quasi-reflectionless SAW-based bandpass filters with tunable b**andwidth," IEEE Microw. Wireless Comp. Lett.,** Vol. 29, No. 7, pp. 447-449, July 2019.

[J23]. R. Gómez-García, L. Yang, J.-M. Munoz-Ferreras and **D. Psychogiou, "Selectivity**-enhancement technique for stepped-impedance-resonator dual-passband f**ilters," IEEE Microw. Wireless Comp. Lett.,** Vol. 29, No. 5, pp. 318-320, March 2019.

[J24]. R. Gómez-García, L. Yang, J.-M. Munoz-Ferreras and **D. Psychogiou, "Contiguous**-channel dual-band **balanced diplexer," IEEE Microw. Wireless Comp. Lett.,** Vol. 29, No. 5, pp. 318-320, March 2019.

[J25]. **D. Psychogiou** and R. Gómez-**García, "Multi**-mode-cavity-resonator-based bandpass filters with multiple levels of transfer-**function adaptivity," IEEE Access,** Vol. 7, pp. 24759-24765, Feb. 2019.

[J26]. N. S. Luhrs, D. J. Simpson and **D. Psychogiou, "Multiband acoustic**-wave-lumped-element resonator-based bandpass-to-**bandstop filters,"** IEEE Microw. Wireless Comp. Lett., Vol. 29, No. 4, pp. 261-263, April 2019.

[J27]. D. J. Simpson, R. Gómez-García and **D. Psychogiou, "Mixed**-Technology quasi-reflectionless planar filters: bandpass, bandstop, and multi-band d**esigns," International Journal of Microwave and Wireless Technologies,** Vol. 67, No. 5, pp. 1854-1869, March 2019. (***Invited***)

[J28]. D. J. Simpson, R. Gómez-García and **D. Psychogiou, "**Single-/multi-band bandpass filters and duplexers with fully-reconfigurable transfer-function characteristics**,"** IEEE Trans. Microw. Theory Techn., Vol. 11, No. 5-6, pp. 466-474, June 2019.

[J29]. R. Gómez-García, J.-M. Munoz-Ferreras and **D. Psychogiou, "**Symmetrical quasi-absorptive RF bandpass filters**,"** IEEE Trans. Microw. Theory Techn., Vol. 67, No. 4, pp. 1472-1482, Feb. 2019.

[J30]. D. J. Simpson, A. Ashley and **D. Psychogiou, "Suppressing in**-band interference: A Compact lumped-element bandpass filter with adaptive in-band interference suppression capabilities**," IEEE Microwave** Magazine, Vol. 20, No. 1, pp. 104-110, Jan. 2019. (***Invited, First place award in the tunable filter student design competition, 2018 IEEE MTT-S, Philadelphia, PA***).

[J31]. R. Gómez-García, J.-M. Munoz-Ferreras and **D. Psychogiou, "Dual**-behavior-resonator-based fully-reconfigurable input-**reflectionless bandpass filters," IEEE Microw. Wireless Comp. Lett.,** Vol. 29, No. 1, pp. 35-37, Dec. 2018.

[J32]. R. Gómez-García, J.-M. Munoz-Ferreras and **D. Psychogiou, "RF reflectionless filtering power dividers,"** IEEE Trans. Circuits Syst. II, Exp. Briefs, accepted for publication, pending issue assignment, Sept. 2018.

[J33]. R. Gómez-García, J.-M. Munoz-Ferreras and **D. Psychogiou, "Split**-type input-reflectionless multi-band **filters," IEEE Microw. Wireless Comp. Lett.,** Vol. 28, No. 11, pp. 981-983, Sept. 2018.

[J34]. D. J. Simpson and **D. Psychogiou, "Coupling Matrix**-Based Design of Fully-Reconfigurable **Differential/Balanced RF Filters,"** IEEE Microw. Wireless Comp. Lett., Vol. 28, No. 10, pp. 888-890, Oct. 2018.

[J35]. R. Gómez-García, J.-M. Munoz-Ferreras and **D. Psychogiou, "Quasi**-elliptic-type multiplexer design **without cross coupling," IEEE Microw. Wireless Comp. Lett.,** Vol. 28, No. 9, pp. 801-803, Aug. 2018.

[J36]. R. Gómez-García, J.-M. Munoz-Ferreras, W. Feng and **D. Psychogiou, "Balance**d symmetrical quasi-reflectionless single- and dual-**band bandpass planar filters," IEEE Microw. Wireless Comp. Lett.,** Vol. 28, No. 9, pp. 798-800, Aug. 2018.

[J37]. R. Gómez-García, J. Rosario-De Jesus and **D. Psychogiou, "Multi**-band bandpass and bandstop RF filtering couplers with dynamically-**controlled bands,"** IEEE Access, Vol. 6, pp. 32321-32327, June 2018.

[J38]. R. Gómez-García, J.-M. Munoz-Ferreras, W. Feng and **D. Psychogiou, "**Wide-band signal-interference duplexer with contiguous single/dual-band channels and its application to quasi-**absorptive bandpass filters',"** IET Elect. Lett., Vol. 54, Issue 9, pp. 578-580, May 2018.

[J39]. R. Gómez-García, J.-M. Munoz-Ferreras and **D. Psychogiou, "Symmetrical quasi**-reflectionless bandstop **filters," IEEE Microw. Wireless Comp. Lett.**, Vol. 28, Issue 4, pp. 302-304, April 2018.

[J40]. **D. Psychogiou** and R. Gómez-García**, "**Switched-bandwidth SAW-based bandpass filters with flat group delay**," IET Electron. Lett.,** Vol. 54, Issue 7, pp. 460-462, May 2018.

[J41]. **D. Psychogiou,** R. Gómez-García **and D. Peroulis, "**Constant in-band group-delay acoustic-wave-lumped-element-resonator-based bandpass filters and diplexers**,"** IEEE Trans. Microw. Theory Techn., Vol. 66, Issue 5, pp. 2199-2209, May 2018.

[J42]. Z. Yang, **D. Psychogiou and D. Peroulis, "**Design and optimization of tunable silicon-integrated evanescent-mode bandpass filters**,"** IEEE Trans. Microw. Theory Techn., Vol. 66, Issue 4, pp. 1790-1803, April 2018.

[J43]. J.-M. Munoz-Ferreras, R. Gómez-García and **D. Psychogiou, "Behavioral** digital modeling of lossy frequency-periodic microwave passive f**ilters," IET Microw. Antennas Propag.,** Vol. 12, No. 2, pp. 265-269, Feb. 2018.

[J44]. R. Gómez-García, R. Loeches-Sánchez, **D. Psychogiou and D. Peroulis, "Multi**-stub-loaded differential-mode planar multi-**band bandpass filters,"** IEEE Trans. Circuits Syst. II, Exp. Briefs, Vol. 65, No. 3, pp. 271-275, March. 2018.

[J45]. **D. Psychogiou** and R. Gómez-**García, "**Reflectionless adaptive RF filters: bandpass, bandstop, and cascade designs**,"** IEEE Trans. Microw. Theory Techn., Vol. 65, Issue 7, pp. 898-902, July 2018.

[J46]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "**RF wide-band bandpass filter with dynamic in-band multi-interference suppression capability**,"** IEEE Trans. Circuits Syst. II, Exp. Briefs, Vol. 65, No. 3, pp. 271-275, March. 2018.

[J47]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "**Tune-all RF planar duplexers with intrinsically-switched channels**,"** IEEE Microw. Wireless Comp. Lett., Vol. 27, No. 4, pp. 350-352, March. 2017.

[J48]. **D. Psychogiou**, B. J. Vaughn, R. Gómez-**García and D. Peroulis, "Reconfigurable multi**-band bandpass filters in evanescent-mode cavity-**resonator technology," IEEE Microw. Wireless Comp. Lett.,** Vol. 27, No. 3, pp. 248-250, March. 2017.

[J49]. R. Gómez-García, **D. Psychogiou,** and D. **Peroulis, "Fully**-tunable filtering power dividers exploiting dynamic transmission-**zero allocation," IET Microw. Antennas Propag., Vol. 11, Issue 3, pp. 378**-385, April 2017.

[J50]. **D. Psychogiou**, R. Gómez-**García, and D. Peroulis, "**Single- and multi-band acoustic-wave-lumped-element-resonator (AWLR) bandpass filters with reconfigurable transfer function**,"** IEEE Trans. Microw. Theory Techn., Vol. 64, Issue 12, pp. 4394-4404, Dec. 2016.

[J51]. **D. Psychogiou**, R. Gómez-**García, and D. Peroulis, "**Fully-adaptive multi-band bandstop filtering sections and their application to multi-functional components**,"** IEEE Trans. Microw. Theory Techn., Vol. 64, Issue 12, pp. 4405-4418, Dec. 2016.

[J52]. **D. Psychogiou**, R. Gómez-**García, and D. Peroulis, "Stub**-loaded-based bandpass filters with dynamically-controlled in-**band notches," IET Electron. Lett., Vol. 85, No. 16, pp. 1393**-1395, August 2016.

[J53]. **D. Psychogiou**, R. Gómez-**García, A. C. Guyette, and D. Peroulis, "Reconfigurable Single/Multi**-Band Filtering Power Divider Based on Quasi-Bandpass Sec**tions," IEEE Microw. Wireless Comp. Lett., Vol. 26, No.** 9, pp. 684-686, Sept. 2016.

[J54]. **D. Psychogiou**, R. Gómez-**García, and D. Peroulis, "Acoustic**-wave-lumped-element-resonator filters with equi-**ripple absorptive stopbands," IEEE Microw. Wireless Comp. Lett.,** Vol. 26, No. 3, pp. 177-179, March 2016.

[J55]. R. Gómez-García, A. C. Guyette, **D. Psychogiou, E. J. Naglich and D. Peroulis, "Quasi**-elliptic multi-band filters with center-**frequency and bandwidth tunability," IEEE Microw. Wireless Comp. Lett., Vol. 26, No. 3,** pp. 192-194, March 2016.

[J56]. **D. Psychogiou**, R. Gómez-**García, and D. Peroulis, "Fully**-reconfigurable bandpass/bandstop filters and their coupling-**matrix representation," IEEE Microw. Wireless Comp. Lett., Vol. 26, No. 1, pp. 22**-24, Jan. 2016.

[J57]. R. Gómez-García, **D. Psychogiou,** R. Loeches-**Sánchez, and D. Peroulis, "Hybrid**-SAW/microstrip signal-**interference bandpass filters," IET Microw. Antennas Propag., Vol. 10, Issue 4, pp. 426**-434, March 2016.

[J58]. M. Hickle, J. Li, **D. Psychogiou and D. Peroulis, "A High**-performance pathway: A 0.95/2.45-GHz switched-frequency bandpass filter using commercially-**available RF MEMS tuning elements," IEEE** Microwave Magazine, Vol. 17, Issue 3, pp. 34-41, March 2016 (***Invited, First place award in the RF MEMS filter student design competition, 2015 IEEE MTT-S, Phoenix, AZ***).

[J59]. **D. Psychogiou**, R. Gómez-**García, and D. Peroulis, "High**-Q bandstop filters exploiting acoustic-wave-lumped-**element resonators (AWLRs)," IEEE Trans. Circuits Syst. II, Exp. Briefs, Vol. 6**3, No. 1, pp. 79-83, Jan. 2016.

[J60]. **D. Psychogiou**, R. Gómez-**García, and D. Peroulis, "Coupling**-matrix-based design of high-Q bandpass filters using acoustic-wave lumped-**element resonator (AWLR) modules," IEEE Trans. Microw. Theory Techn.** Vol. 63, Issue 12, pp. 4319-4328, Dec. 2015.

[J61]. **D. Psychogiou and D. Peroulis, "Advances in high-Q tunable filter technologies,"** Int. J. Adv. Eng. Sci. Appl. Math., Springer., Vol. 7, Issue 4, pp. 170-176, Dec. 2015. (***Invited***)

[J62]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "Acoustic wave resonator**-based absorptive bandstop filters with ultra-**narrow bandwidth," IEEE Microw. Wireless Comp. Lett., Vol. 25, No. 9, pp. 570**-572, Sept. 2015.

[J63]. **D. Psychogiou**, R. Gómez-García, R. Loeches-Sánchez and **D. Peroulis, "Hybrid acoustic**-wave-lumped-element resonators (AWLRs) for high-Q bandpass filters with quasi-**elliptic frequency response," IEEE Trans.** Microw. Theory Techn. Vol. 63, Issue 07, pp. 2233-2244, July 2015.

[J64]. R. Gómez-García, R. Loeches-Sánchez, **D. Psychogiou, and D. Peroulis, "Single/multi**-band Wilkinson-**type power dividers with embedded transversal filtering sections and application to channelized filters," IEEE** Trans. Circuits Syst. I, Reg. Papers, Vol. 62, No. 6, pp. 1518-1527, June 2015.

[J65]. J. Li, M. Hickle, **D. Psychogiou and D. Peroulis, "A compact L**-Band bandpass filter with RF-MEMS-**enabled reconfigurable notches for interference rejection in GPS applications," IEEE Microwave Magazine, Vol.** 16, Issue 1, pp. 81-88, February 2015 (***Invited, First place award in the RF MEMS filter student design competition, 2015 IEEE MTT-S, Tampa, FL***).

[J66]. **D. Psychogiou and D. Peroulis, "Tunable VHF miniaturized helical filters," IEEE Trans. Microw. Theory** Tech., Vol. 62, No.2, February 2014.

[J67]. **D. Psychogiou** and D. Perou**lis, "Bandpass filter with center frequency and bandwidth control," Microw.** Opt. Technol. Lett., Vol. 55, Issue 11, pp. 2745-2750, August 2013.

[J68]. **D. Psychogiou**, Y. Li, J. Hesselbarth, D. Peroulis, C. Hierold, C. **Hafner, "Continuously variable W**-band phase shifters based on MEMS-**actuated conductive fingers," International Journal of Microwave and Wireless** Technologies, Vol. 5, Issue 04, pp. 477-489, August 2013.

[J69]. Y. Li, **D. Psychogiou**, S. Kühne, J. Hesselbarth, C. **Hafner, C. Hierold, "Large stroke staggered verti**cal comb-drive actuator for the application of a millimeter-**wave tunable phase shifter," IEEE Journal of** Microelectromechanical Systems, Vol. 22, Issue 4, pp. 962-975, August 2013.

[J70]. **D. Psychogiou, D. Peroulis, Y. Li, C. Hafner, "V**-band bandpass filter with continuously variable center **frequency," IET Microwaves, Antennas Prop., Vol. 7, Issue 8, pp. 701** - 707, June 2013.

[J71]. **D. Psychogiou**, Y. Li, J. Hesselbarth, S. Kühne, D. Peroulis, C. Hierold, C. **Hafner, "Millimeter**-wave phase shifter based on waveguide-mounted RF-**MEMS," Microwave and Optical Technology Letters, Vol. 55, Issue 3,** pp. 465-468, March 2013.

[J72]. Y. Li, S. Kühne, **D. Psychogiou, J. Hesselbarth, C. Hierold, "A microdevice with large deflection for** variable-**ratio RF MEMS power divider applications," Journa**l of Micromechanics and Microengineering, Vol. 21, Issue 7, pp. 1-9, June 2011.

- **Refereed Conference Papers**

[C1]. A. Ashley and **D. Psychogiou, "**Non-reciprocal MMIC-based dual-band bandpass filters**", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Atlanta, GA, USA, June 6-11, 2021.

[C2]. D. J. Simpson, R. Gómez-García and **D. Psychogiou, "**Hybridly-integrated quasi-elliptic-type bandpass filters with symmetrical quasi-reflectionless characteristics**", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Atlanta, GA, USA, June 6-11, 2021.

[C3]. A. Ashley, G. Lasser, A. Madanayake, Z. Popovic and **D. Psychogiou**, **"**MMIC GaAs X-band isolator with enhanced power transmission response**," in 202**1 IEEE Radio and Wireless Symposium (RWS), San Diego, CA, USA, Jan. 17-20, 2021. (***2nd Best Student Paper Award)***

[C4]. N. Akram, A. Madanayake, S. B. Venkatakrishnan, J. L. Volakis, **D. Psychogiou**, T. Marzetta, and T. S. Rappaport, **"**Massive-MIMO and digital mm-wave arrays on RF-SoCs using FDM for M-fold increase in antennas per ADC/DAC**," in 202**1 IEEE Radio and Wireless Symposium (RWS), San Diego, CA, USA, Jan. 17-20, 2021 (***Student Paper Finalist***)

[C5]. **D. Psychogiou** and R. Gómez-**García, "**Substrate-integrated coaxial bandpass filters with symmetrical quasi-absorptive response**", in** General Assembly and Scientific Symposium (GASS) of the Int. Union of Radio Science (URSI), Rome, Italy, Aug. 29-Sept.5, 2020. (***Young Scientist Award***)

[C6]. K. Zhao and **D. Psychogiou, "**Monolithic SLA-based capacitively-loaded high-Q coaxial resonators and bandpass filters**", in Proc.** 50th European Microwave Conference (EuMC), 2020, Jaarbeurs Utrecht, Netherlands, Sept. 13-Oct.18, 2020.

[C7]. A. Ashley and **D. Psychogiou, "**Co-designed quasi-circulator and bandpass filter**", in Proc.** 50th European Microwave Conference (EuMC), 2020, Jaarbeurs Utrecht, Netherlands, Sept. 13-Oct.18, 2020.

[C8]. D. J. Simpson and **D. Psychogiou, "**High-order fully-reconfigurable balanced bandpass filters using mixed technology resonators**", in Proc.** 50th European Microwave Conference (EuMC), 2020, Jaarbeurs Utrecht, Netherlands, Sept. 13-Oct.18, 2020.

[C9]. **D. Psychogiou** and R. Gómez-**García, "**Miniaturized signal-interference bandpass filters using resonant RF signal paths**", in Proc.** 50th European Microwave Conference (EuMC), 2020, Jaarbeurs Utrecht, Netherlands, Sept. 13-Oct.18, 2020.

[C10]. D. J. Simpson and **D. Psychogiou, "**Fully-reconfigurable non-reciprocal bandpass filters**", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Los Angeles, CA, USA, June 21-26, 2020.

[C11]. **D. Psychogiou** and R. Gómez-García**, "**Quasi-absorptive substrate-integrated bandpass filters using Capacitively-Loaded Coaxial Resonators**", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Los Angeles, CA, USA, June 21-26, 2020. (***Advanced Practice Paper Competition Finalist***)

[C12]. M. Kong, **D. Psychogiou** and Y. Wu**, "**Quasi-elliptic coupled-line-based balanced bandpass filters with ultra-wide stopband characteristics**", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Los Angeles, CA, USA, June 21-26, 2020.

[C13]. J. A. Estrada, P. De Paco Sanchez, S. Johannes, **D. Psychogiou** and Z. Popovic**, "**Co-designed high-efficiency GaN filter power amplifier**", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Los Angeles, CA, USA, June 21-26, 2020.

[C14]. D. J. Simpson, R. Gómez-García and **D. Psychogiou, "Tunable multi**-band bandpass filters using transversal multi-**resonant cells," in 2020 I**EEE Radio and Wireless Symposium (RWS), San Antonio, TX, USA, Jan., 2020.

[C15]. A. Ashley and **D. Psychogiou, "Non**-reciprocal RF-bandpass filters using transistor-based microwave **resonators", in Proc. 49th European Microwave Conference (EuMC), 201**9, Paris, France, Sept. 29-Oct.4, 2019.

[C16]. D. Simpson and **D. Psychogiou, "Magnet**-less non-reciprocal bandpass filters with tunable center **frequency", in Proc. 49th European Microwave Conference (EuMC), 201**9, Paris, France, Sept. 29-Oct.4, 2019.

[C17]. K. Sadasivan and **D. Psychogiou, "Widely**-reconfigurable 2.5:1 coaxial-cavity resonators using actuated liquid-**metal posts", in Proc. 49th European Microwave Conference (EuMC), 201**9, Paris, France, Sept. 29-Oct.4, 2019.

[C18]. M. Deng and **D. Psychogiou, "Tune**-all substrate-integrated-waveguide **(SIW) bandpass filters", in Proc.** 49th European Microwave Conference (EuMC), 2019, Paris, France, Sept. 29-Oct.4, 2019.

[C19]. R. Gómez-García, J.-M. Munoz-Ferreras and **D. Psychogiou, "3**-dB filtering power dividers with quasi-reflectionless behavior at all their **ports," in 2019 IEEE MTT**-S Int. Microwave Workshop Series on Advanced Materials and Processes (IMWS-AMP), Bochum, Germany, July 16-18, 2019.

[C20]. R. Gómez-García, L. Yang, J.-M. Munoz-Ferreras and **D. Psychogiou, "Multi**-band filters based on coupled-multi-**line cells," in 2019 IEEE Int. Wireless Symp. (IWS), Chengdu, China, May 19**-22, 2019.

[C21]. R. Gómez-García and **D. Psychogiou, "**New developments on RF filters with embedded adaptive multinotch capabilities for dynamic interference suppression**", in** 2019 IEEE International Conference on Microwave and Millimeter Wave Technology (ICMMT2019), Guangzhou, China, 19-22 May, 2019. (***Invited***)

[C22]. K. Sadasivan and **D. Psychogiou, "Tunable 3D**-printed coaxial-cavity filters with mixed electromagnetic **coupling," in 2019 IEEE Int. Symposium on Antennas and Propagation and USNC/URSI National Radio** Science Meeting, Atlanta, GA, USA, 7-12, July 2019. (***Invited***)

[C23]. D. J. Simpson and **D. Psychogiou, "Broadband linear antenna arrays with frequency**-invariant half-power **beamwidth," in 2019 IEEE Int. Symposium on Antennas and Propagation and USNC/URSI National Radio** Science Meeting, Atlanta, GA, USA, July 7-12, 2019.

[C24]. D. J. Simpson and R. Gómez-García and **D. Psychogiou, "**Multi-band bandpass filters with multiple levels of transfer function reconfigurability**", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Boston, MA, USA, June 2-7, 2019. (***Student Paper Competition Finalist***)

[C25]. R. Gómez-García, W. Feng, J.-M. Munoz-Ferreras and **D. Psychogiou, "**Input-reflectionless negative-group-delay bandstop-filter networks based on lossy complementary duplexers**", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Boston, MA, USA, June 2-7, 2019.

[C26]. D. J. Simpson and **D. Psychogiou, "**Multi-band differential bandpass filters with quasi-elliptic-type passbands and multi-transmission zero common-mode suppression**", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Boston, MA, USA, June 2-7, 2019.

[C27]. J.-M. Munoz-Ferreras, R. Gómez-García and **D. Psychogiou, "Digital modeling of microwave filters using** coupled-**line sections," in 2019 IEEE Numerical Electromagnetic and Multiphysics Modeling Optimization** (NEMO), Boston, MA, USA, May 29-31, 2019.

[C28]. D. J. Simpson, R. Gómez-García and **D. Psychogiou, "Highly**-selective and fully-reconfigurable RF **duplexers for advanced wireless systems," in Government Microcircuit Applications and Critical Technology** Conference (GOMACTech), Albuquerque, NM, USA, March 25-28, 2019.

[C29]. L. Marzall, Y. Zhang, M. Pinto, A. Ashley, K. Gao, J. Hryn, **D. Psychogiou and Z. Popovic, "Analysis of** self-biased nano-**composite microstrip circulators," in Government Microcircuit Applications and Critical** Technology Conference (GOMACTech), Albuquerque, NM, USA, March 25-28, 2019.

[C30]. R. Gómez-García, J.-M. Munoz-Ferreras, and **D. Psychogiou, "Input**-reflectionless out-of-phase 3-dB **bandpass filtering coupler," in 2019 IEEE Radio and Wireless Symposium (RWS), Orlando, FL, USA, Jan., 2019** (***Invited***).

[C31]. R. Gómez-García, J.-M. Munoz-Ferreras, W. Feng and **D. Psychogiou, "**Two topologies of balanced dual-band bandpass filters with extended common-mode-suppression bandwidth**," in 2019 IEEE Radio and Wireless** Symposium (RWS), Orlando, FL, USA, Jan., 2019.

[C32]. D. J. Simpson, R. Gómez-García and **D. Psychogiou, "Highly**-selective RF duplexers using multi-resonant **junctions," in 2019 IEEE Radio and Wireless Symposium (RWS), Orlando, FL, USA, Jan., 201**9. (***Student Paper Competition Finalist***)

[C33]. R. Gómez-García, J.-M. Munoz-Ferreras and **D. Psychogiou, "Tunable input**-quasi-reflectionless **multiplexers," in 2018 IEEE MTT**-S Int. Microw. Workshop Series on 5G Hardware and System Technologies (IMWS-5G), Dublin, Ireland, August 30-31, 2018.

[C34]. J.-M. Munoz-Ferreras, **D. Psychogiou** and R. Gómez-**García, "Line time**-invariant behavioral digital models of frequency-**periodic RF/microwave filters," in Proc. 48th European Microwave Conference (EuMC), 2018,** Madrid, Spain, Sept. 23-28, 2018.

[C35]. M. Pinto, L. Marzall, A. Ashley, **D. Psychogiou and Z. Popovic, "Design**-oriented modelling of microstrip **ferrite circulators," in Proc. 48th European Microwave Conference (EuMC), 2018, Madrid, Spain, Sept. 23**-28, 2018.

[C36]. A. Ashley, L. Marzall, Z. Popovic and **D. Psychogiou, "Frequency selecti**ve ferrite circulators with quasi-**elliptic transmission response," in Proc. 48th European Microwave Conference (EuMC), 2018, Madrid, Spain,** Sept. 23-28, 2018. ***(Received Young Engineer Prize***)

[C37]. D. J. Simpson, R. Gómez-García and **D. Psychogiou, "Planar RF dupl**exer with multiple levels of transfer-**function reconfigurability," in Proc. 48th European Microwave Conference (EuMC), 2018, Madrid, Spain, Sept.** 23-28, 2018.

[C38]. D. J. Simpson, R. Gómez-García and **D. Psychogiou, "Mixed**-technology quasi-reflectionless planar b**andpass filters," in Proc. 48th European Microwave Conference (EuMC), 2018, Madrid, Spain, Sept. 23**-28, 2018. ***(Young Engineer Prize Finalist***).

[C39]. **D. Psychogiou** and R. Gómez-**García, "Fully**-reconfigurable single-band and multi-band microwave RF **filters," in 2018 IEEE Int. Symposium on Antennas and Propagation and USNC/URSI National Radio Science** Meeting, Boston, MA, USA, 8-13 July 2018.

[C40]. R. Gómez-García, J.-M. Munoz-Ferreras and **D. Psychogiou, "Multi**-band reflectionless filtering impedance **transformers," in 201**8 IEEE Int. Wireless Symp. (IWS), Chengdu, China, May 6-10, 2018.

[C41]. **D. Psychogiou** and D. J. Simpson**, "**Multi-band acoustic-wave-lumped-element resonator-based bandstop filters with continuously tunable stopband bandwidth**", in IEE**E MTT-S International Microwave Symposium Digest (IMS), Philadelphia, PA, USA, June 10-15, 2018.

[C42]. **D. Psychogiou**, D. J. Simpson and R. Gómez-**García, "**Input-reflectionless acoustic-wave-lumped-element resonator-based bandpass filters**", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Philadelphia, PA, USA, June 10-15, 2018.

[C43]. D. J. Simpson, R. Gómez-García and **D. Psychogiou, "**Tunable multiband bandpass-to-bandstop RF filters**",** in IEEE MTT-S International Microwave Symposium Digest (IMS), Philadelphia, PA, USA, June 10-15 2018. (***Advanced Practice Paper and Student Paper Competition Finalist***).

[C44]. M. Pinto, L. F. Marzall, A. Ashley, **D. Psychogiou and Z. Popovic, "A design approach for monolithically integrated broadband circulators," in** 2018 ACES, Denver, CO, USA, March 24-29, 2018.

[C45]. L. F. Marzall, M. Pinto, A. Ashley, **D. Psychogiou and Z. Popovic, "Co**-Simulation of DC magnetic bias **fields and RF performance for microwave ferrite circulators," in** 2018 ACES, Denver, CO, USA, March 24-29, 2018.

[C46]. C. Gay, M. Cullen and **D. Psychogiou, "Design concepts for broadband antenna arrays with constant half-power beamwidth," in** 2018 ACES, Denver, CO, USA, March 24-29, 2018.

[C47]. A. Ashley, L. F. Marzall, M. Pinto, Z. Popovic and **D. Psychogiou, "Bandwidth design of fer**rite-based **circulators," in** 2018 ACES, Denver, CO, USA, March 24-29, 2018.

[C48]. D. J. Simpson, R. Gómez-García and **D. Psychogiou, "UHF**-Band bandpass filters with fully-reconfigurable **Transfer Function," in** 2018 ACES, Denver, CO, USA, March 24-29, 2018.

[C49]. **D. Psychogiou**, R. Gómez-García **and D. Peroulis, "Tunable reflectionless microstrip bandpass filters," in** 2018 IEEE Radio and Wireless Symposium (RWS), Anaheim, CA, USA, Jan., 2018.

[C50]. **D. Psychogiou** and R. Gómez-**García, "Wide**-passband filters with in-band tunable notches for agile multi-interference suppression in broad-**band antenna systems," in 2018 IEEE Radio and Wireless Symposium (RWS),** Anaheim, CA, USA, Jan., 2018.

[C51]. **D. Psychogiou,** R. Gómez-**García and D. Peroulis, "Multi**-resonant acoustic-wave-lumped-element resonators (AWLRs) for multi-**band bandpass filters with enhanced fractional bandwidth," in 2017 IEEE Int.** Conf. on Microw., Commun., Antennas Electron. Syst. (COMCAS), Tel Aviv, Israel, Nov., 2017.

[C52]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "**SAW-based bandpass filters with flat in-band group delay and enhanced fractional bandwidth**", in IEEE MTT**-S International Microwave Workshop Series on Advanced Materials and Processes for RF and THz Applications (IMWS-AMP), September 20-22, Pavia, Italy.

[C53]. Z. Peng, **D. Psychogiou and C. Li,** "Investigation of the roles of filters for a harmonic FMCW radar", **in** IEEE Applied Computational Electromagnetics Society Symposium (ACES), Suzhou, China, August 1-4, 2017.

[C54]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis,** "RF Design of acoustic-wave-lumped-element-resonator-(AWLR)-based bandpass filters with constant in-band group delay", **in IEEE MTT**-S International Microwave Symposium Digest (IMS), Honolulu, HI, USA, June 4-7 2017.

[C55]. R. Gómez-García, J.-M. Munoz-Ferreras and **D. Psychogiou,** "Fully-reconfigurable bandpass filter with static couplings and intrinsic-switching capabilities", **in IEEE MTT**-S International Microwave Symposium Digest (IMS), Honolulu, HI, USA, June 4-7 2017.

[C56]. R. Gómez-García, R. Loeches-Sánchez, **D. Psychogiou**, J.-M. Munoz-**Ferreras and D. Peroulis** "Dual-passband filters and extended-stopband wide-band bandpass filters based on generalized stub-loaded planar circuits", **in IEEE MTT**-S International Microwave Symposium Digest (IMS), Honolulu, HI, USA, June 4-7 2017.

[C57]. W. Yang, M. Hickle, **D. Psychogiou and D. Peroulis,** "L-band high-Q tunable quasi-absorptive bandstop-to-all-pass filter", **in IEEE MTT**-S International Microwave Symposium Digest (IMS), Honolulu, HI, USA, June 4-7 2017.

[C58]. R. Gómez-García, J.-M. Munoz-Ferreras, **D. Psychogiou**, M. Addou, J. Lintignat, B. Barelaud and B. Jarry, **"Lumped**-element RF analog multi-band bandpass filter concept for software-defined-**radio architectures," in** 2017 IEEE NEWCAS, Strasbourg, France, June 25-28, 2017.

[C59]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "Signal interference**-based bandpass filters with frequency reconfigurable in-**band rejection bands," USNC–**URSI National Radio Science Meeting, Boulder, CO, Jan. 4–6, 2017.

[C60]. J.-M. Munoz-Ferreras, **D. Psychogiou**, R. Gómez-García **and D. Peroulis, "**A substrate-integrated-waveguide dual-band bandpass filter based on signal-interference principles**," in 2017 IEEE Radio and Wireless** Symposium (RWS), Phoenix, AZ, USA, Jan., 2017.

[C61]. R. Gómez-García, **D. Psychogiou and D. Peroulis, "Single/multi**-band multi-functional passive components with reconfiguration capabilities**," in 2017 IEEE Radio and Wireless Symposium (RWS), Phoenix,** AZ, USA, Jan., 2017.

[C62]. **D. Psychogiou**, R. Gómez-García, J.-M. Munoz-**Ferreras and D. Peroulis, "Substrate**-integrated-waveguide signal-**interference bandpass filters," in Proc. 46th European Microwave Conference (EuMC), 2016, London,** UK, Oct. 2016.

[C63]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis,** "Continuously-tunable-bandwidth acoustic-wave resonator-based bandstop filters and their multi-mode m**odeling," in Proc. 4**6th European Microwave Conference (EuMC), 2016, London, UK, Oct. 2016.

[C64]. R. Loeches-Sánchez, **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "A class of d**ifferential-mode single/dual-band bandpass planar filters based on signal-**interference techniques", in 17th IEEE Wireless and** Microwave Technology Conference (WAMICON), Clearwater Beach, FL, USA, April 2016

[C65]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis,** "Recent advances in reconfigurable microwave filter **design", in 17th IEEE Wireless and Microwave Technology Conference (WAMICON), Clearwater Beach, FL,** USA, April 2016. (***Invited***)

[C66]. R. Gómez-García, **D. Psychogiou**, J.-M. Munoz-**Ferreras and D. Peroulis,** "Digital representation of multi-functional microwave passive circuits", **in 17th IEEE Wireless and Microwave Technology Conference** (WAMICON), Clearwater Beach, FL, USA, April 2016.

[C67]. W. Wang, W. N. Allen, **D. Psychogiou and D. Peroulis, "Tunable bandpass**-bandstop filter cascade for VHF **band application", in 17th IEEE Wireless and Microwave Technology Conference (WAMICON), Clearwater** Beach, FL, USA, April 2016.

[C68]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "Tunable** acoustic-wave-lumped-element Resonator (AWLR)-based bandpass f**ilters", in IEEE MTT**-S International Microwave Symposium Digest (IMS), San Francisco, CA, USA, May 2016.

[C69]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "Multi**-functional low-pass filters with dynamically-controlled in-band rejection notch**es", in IEEE MTT**-S International Microwave Symposium Digest (IMS), San Francisco, CA, USA, May 2016.

[C70]. R. Gómez-García, **D. Psychogiou and D. Peroulis, "Reconfigurable** single/multi-band planar impedance transformers with incorporated bandpass filtering f**unctionality", in IEEE MTT**-S International Microwave Symposium Digest (IMS), San Francisco, CA, USA, May 2016.

[C71]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "A Class of** fully-reconfigurable planar multi-band bandstop f**ilters", in IEEE MTT**-S International Microwave Symposium Digest (IMS), San Francisco, CA, USA, May 2016.

[C72]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "Adaptive**-transfer-function bandpass filters using reconfigurable evanescent-mode-cavity resonator c**ascades", in IEEE MTT**-S International Microwave Symposium Digest (IMS), San Francisco, CA, USA, May 2016.

[C73]. K. Zeng, **D. Psychogiou, W. Allen and D. Peroulis, "A Constant**-transfer-function widely-tunable VHF modular field-programmable filter array (FPFA) with IIP3 of 38-**52 dBm", in IEEE** MTT-S International Microwave Symposium Digest (IMS), San Francisco, CA, USA, May 2016.

[C74]. R. Gómez-García, **D. Psychogiou**, J.-M. Munoz-**Ferreras and D. Peroulis, "Multi**-band signal-interference planar bandpass filters based on stub-loaded **transversal filtering sections," in 2016 IEEE Int. Wireless Symp.** (IWS), Shanghai, China, March, 2016.

[C75]. M. Abdelfattah, **D. Psychogiou and D. Peroulis, "V**-band frequency reconfigurable cavity-based bandpass **filters," in 2016 IEEE** ICWITS-ACES, Honolulu, Hawaii, USA, March, 2016.

[C76]. D. Peroulis and **D. Psychogiou, "**MEMS-tunable silicon-integrated cavity filters**," in 2016 IEEE Radio and** Wireless Symposium (RWS), Austin, TX, USA, Jan., 2016. (***Invited***)

[C77]. J. Li, Z. Yang, M. D. Hickle, **D. Psychogiou and D. Peroulis, "Elec**trical properties of creep-resistant nanocrystalline gold-vanadium thin films at millimeter-**wave frequencies," in 2016 IEEE Radio and Wireless** Symposium (RWS), Austin, TX, USA, Jan., 2016.

[C78]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "Signal interferen**ce bandpass filters with dynamic in-**band interference suppression," in 2016 IEEE Radio and Wireless Symposium (RWS), Austin, TX, USA, Jan.,** 2016.

[C79]. R. Loeches-Sánchez, **D. Psychogiou**, R. Gómez-García **and D. Peroulis, "Application of capacitive**-loading size-reduction techniques to multi-band and reconfigurable-bandwidth signal interference planar bandpass **filters,"** in 2016 IEEE Radio and Wireless Symposium (RWS), Austin, TX, USA, Jan., 2016.

[C80]. K. Zeng, **D. Psychogiou, W. Allen and D. Peroulis, "A continuously tunable 95**-138 MHz bandpass **resonator with 40 dBm IIP3," in 2015 IEEE Int. Conf. on Microw., Commun., Antennas Electron. Syst**. (COMCAS), Tel Aviv, Israel, Nov., 2015.

[C81]. R. Loeches-Sánchez, **D. Psychogiou,** R. Gómez-García **and D. Peroulis, "Transformers with incorporated** filtering capabilities exploiting signal-**interference principles,"** in 2015 IEEE Int. Conf. on Microw., Commun., Antennas Electron. Syst. (COMCAS), Tel Aviv, Israel, Nov., 2015.

[C82]. **D. Psychogiou**, R. Gómez-G**arcía and D. Peroulis, "Acoustic**-wave-lumped-element resonator (AWLR) architectures for high-*Q* **reflective bandstop filters," in Proc. 45th European Microwave Conference (EuMC),** 2015, Paris, France, Sept. 2015. ***(Young Engineer Prize Finalist***).

[C83]. R. Loeches-Sánchez, **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "Miniaturized signal**-interference **planar filters," in Proc. 45th European Microwave Conference (EuMC), 2015, Paris, France, Sept. 2015.**

[C84]. R. Gómez-García, **D. Psychogiou**, R. Loeches-**Sánchez and D. Peroulis, "Bandwidth enlargement in** acoustic-**wave RF bandpass filters with planar transversal circuits," in Proc. 45th European Microwave** Conference (EuMC), 2015, Paris, France, Sept. 2015.

[C85]. R. Gómez-García, J.-M. Munoz-Ferreras, **D. Psychogiou and D. Peroulis, "**Signal-interference RF wide-band bandpass filters using half-mode substrate-integrated-w**aveguide (HM SIW) Directional Couplers", in** IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting (APS), Vancouver, BC, Canada, July 2015.

[C86]. J. Li, Z. Yang, **D. Psychogiou, M. D. Sinanis and D. Peroulis, "Creep**-resistant nanocrystalline gold-vanadium alloyed microcorrugated d**iaphragms (MCDS)", in 18**th International Conference on Solid-State Sensors, Actuators and Microsystems (Transducers 2015), Anchorage, AL, USA, June 2015.

[C87]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "High**-*Q* bandpass filters using hybrid acoustic-wave-lumped-element resonators (AWLRs) for UHF a**pplications", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Phoenix, AZ, USA, May 2015.

[C88]. D. Scarbrough, **D. Psychogiou, D. Peroulis and C. L. Goldsmith, "Low**-loss, broadly-tunable cavity filter operating at UHF f**requencies", in IEEE MTT**-S International Microwave Symposium Digest (IMS), Phoenix, AZ, USA, May 2015.

[C89]. **D. Psychogiou**, R. Gómez-García, D. Scarbrough, C. L. Goldsmith and D. Peroulis, "Design of high-Q absorptive bandstop filters with static and reconfigurable attenuation", **in IEEE** MTT-S International Microwave Symposium Digest (IMS), Phoenix, AZ, USA, May 2015.

[C90]. **D. Psychogiou**, D. Peroulis, R. Loeches-Sánchez and R. Gómez-García, "Analog signal-interference narrow-band bandpass filters with hybrid transmission-line/SAW-resonator transversal filtering sections", **in** IEEE International Symposium on Circuits and Systems (ISCAS), Lisbon, Portugal, May 2015.

[C91]. K. Zeng, **D. Psychogiou** and D. Peroulis, "A VHF tunable lumped-element filter with mixed electric-magnetic couplings", **in 16th IEEE Wireless and Microwave Technology Conference (WAMICON), Cocoa** Beach, FL, USA, April 2015. (***First Place Award at the Student Paper Competition***)

[C92]. **D. Psychogiou**, R. Gómez-García and D. Peroulis, "**RF** design of narrowband absorptive bandstop filters **for UHF Applications", in 16th IEEE Wireless and Microwave Technology Conference (WAMICON), Cocoa** Beach, FL, USA, April 2015.

[C93]. **D. Psychogiou**, M. D. Sinanis and D. Peroulis, "**Silicon**-micromachined spacers for UHF cavity r**esonators",** in 28th IEEE International Conference on Micro Electro Mechanical Systems (MEMS), Estoril, Portugal, January 2015.

[C94]. **D. Psychogiou, R. Mao and D. Peroulis, "Series**-cascaded absorptive notch-filters for 4G-**LTE Radios," in** 2015 IEEE Radio and Wireless Symposium (RWS), San-Diego, CA, USA, January 2015.

[C95]. R. Loeches-Sánchez, **D. Psychogiou**, D. Peroulis and R. Gómez-García, "**A** class of planar multi-band Wilkinson-type power divider with intrinsic filtering f**unctionality,"** in 2015 IEEE Radio and Wireless Symposium (RWS), San-Diego, CA, USA, January 2015. (***Student Paper Competition Finalist***)

[C96]. R. Loeches-Sánchez, **D. Psychogiou**, D. Peroulis and R. Gómez-García, "**Sharp**-rejection high-pass and dual-band bandpass planar filters with multi-transmission-zero-generation transversal c**ell",** in 2015 IEEE Radio and Wireless Symposium (RWS), San-Diego, CA, USA, January 2015.

[C97]. **D. Psychogiou, Z. Yang, and D. Peroulis, "RF**-MEMS enabled power divider with arbitrary power division **ratio," in Proc. 42nd Eu**ropean Microwave Conference (EuMC), 2012, Amsterdam, Netherlands, Nov. 2012.

[C98]. Y. Li, S. Kühne, **D. Psychogiou, and C. Hierold, "Effect of** thermal annealing on the stiffness of an SU-8 torsional s**pring," in Proc. 26th European Conf. on Solid**-State Transducers, EUROSENSORS 2012, Krakow, Poland, September 2012.

[C99]. **D. Psychogiou, Z. Yang, and D. Peroulis, "RF**-MEMS reconfigurable power divider for multi-functional antenna t**ransceivers,"** in IEEE Int. Symposium on Antennas and Propagation and USNC/URSI National Radio Science Meeting, Chicago, USA, July 2012.

[C100]. **D. Psychogiou, J. Hesselbarth, Y. Li, S. Kühne, and C. Hierold, "W**-band tunable reflective type phase shifter based on waveguide-mounted **RF MEMS,"** 2011 IEEE MTT-S International Microwave Workshop Series on Millimeter Wave Integration Technologies (IMWS), Sitges, Spain, September 2011.

[C101]. **D. Psychogiou, J. Hesselbarth, L. Yunjia, S. Kühne, and C. Hierold, "Waveguide**-mounted RF MEMS for tunable W-band analog type phase s**hifter," in Proc. 12th International Symposium on RF MEMS and RF** Microsystems (MEMSWAVE 2011), Athens, Greece, June 2011.

[C102]. Y. Li, S. Kühne, and D. **Psychogiou, J. Hesselbarth and C. Hierold, "Large deflection actuator for variable** RF **MEMS power divider application," in Proc. 21st Micromech. and Microsyst. Workshop, Enschede,** Netherlands, September 2010.

[C103]. **D. Psychogiou and J. Hesselbarth, "Comparing miniaturization techniques for microstrip 180° hybrid ring junctions," in** 2010 Mediterranean Microwave Symposium (MMS), Guzelyurt, Northern Cyprus, August 2010.

[C104]. **D. Psychogiou and J. Hesselbarth, "Diversity antennas for isotropic coverage," in** IEEE European Wireless Technology Conference (EuWIT), Paris, France, September 2010.

[C105]. **D. Psychogiou, J. Hesselbarth, and R. Vahldieck, "Switched diversity antennas characterized by a coverage probability parameter," in** IEEE German Microwave Conference (GEMIC), Berlin, Germany, March 2010.

- **Conference Proceedings**

[C106]. **D. Psychogiou** and A. Ashley, "RF co-designed non-reciprocal bandpass filters," ICEAA / IEEE APWC / USNC-URSI RSM, August 9-13, 2021, in Honolulu, Hawaii, USA..

[C107]. A. Ashley, Laila F. Marzall, Z. Popovic and **D. Psychogiou, "Frequency**-selective ferrite-**based circulators,"** USNC–URSI National Radio Science Meeting, Boulder, CO, Jan. 9–11, 2019.

[C108]. N. S. Luhrs and **D. Psychogiou, "Coupled**-resonator-based design of thin-film bulk acoustic resonator (FBAR)-**based bandpass filters," USNC–**URSI National Radio Science Meeting, Boulder, CO, Jan. 9–11, 2019.

[C109]. K. Sadasivan and **D. Psychogiou, "RF characterization of 3D-printed coaxial cavity resonators," USNC–**URSI National Radio Science Meeting, Boulder, CO, Jan. 9–11, 2019.

[C110]. D. J. Simpson, R. Gómez-García and **D. Psychogiou, "Quasi**-elliptic bandpass filters and RF-duplexers with tunable center frequency, bandwidth and intrinsic RF switching-**off capabilities," USNC–**URSI National Radio Science Meeting, Boulder, CO, Jan. 9–11, 2019.

[C111]. Laila F. Marzall, M. Pinto, A. Ashley, **D. Psychogiou and Z. Popovic, "CAD of self**-biased ferrite **circulators," USNC–**URSI National Radio Science Meeting, Boulder, CO, Jan. 9–11, 2019.

[C112]. D. J. Simpson, C. Gay and **D. Psychogiou, "Design of wideband elliptic monopole antenna arrays with** constant half-**power beamwidth," USNC–**URSI National Radio Science Meeting, Boulder, CO, Jan. 9–11, 2019.

[C113]. A. Madanayake, J. W. Kocsis, **D. Psychogiou**, S. Mandal, G. Mendis, N. Udayanga and Y. Wang**," AI**-enabled contextually-aware spectrum sensors with machine-learning-enhanced RF circuits for improved spectral efficienc**y in cognitive radio," NSF Millimeter**-wave RCN, NYU Brooklyn, NY, July. 12-13 2018.

[C114]. A. Madanayake, R. Cintra, **D. Psychogiou**, S. Mandal, L. Belostotski, V. Ariyarathna, D. Coelho, V. **Coutinho, N. Akram and N. Udayanga "Co**-design of RF front-ends and O(N) approximate-DFTs for low-SWaP **SDR receivers," NSF Millimeter**-wave RCN, University of Arizona, Tucson, AZ, Jan. 18-19 2018.

[C115]. A. Madanayake, J. Wei, V. Saxena, **D. Psychogiou**, S. Mandal, R. Cintra, L. Belostotski, G. Mendis, V. Ariyarathna, N. Udayanga and Y. Wang **"Attention, saliency, and contextual adaptation in RF machine learning array receivers," NSF Millimeter**-wave RCN, University of Arizona, Tucson, AZ, Jan. 18-19 2018.

[C116]. M. Cullen, C. Gay and **D. Psychogiou, "Broadband Antenna Arrays Using Frequency** selective feeding n**etworks," USNC–**URSI National Radio Science Meeting, Boulder, CO, Jan. 4–7, 2018.

[C117]. L. Marzall, M. Pinto, A. Ashley, **D. Psychogiou** and Z. Popovic**, "Microstrip circulator bandwidth investigation," USNC–**URSI National Radio Science Meeting, Boulder, CO, Jan. 4–7, 2018.

[C118]. D. J. Simpson and **D. Psychogiou, "Balanced microwave RF filters with quasi**-elliptic-type differential-mode passband and multi-notch common-**mode suppression," USNC–**URSI National Radio Science Meeting, Boulder, CO, Jan. 4–7, 2018.

[C119]. A. Madanayake, S. Mandal, **D. Psychogiou**, R. Cintra, L. Belostotski, C. Wijenayake, T. Rappaport, V. **Ariyarathna, D. Coelho, N. Udayanga and X. Tang, "Frequency**-agile transfer-function adaptable filters and low SWaP mmW multi-beamformers using mixed passies **and analog/digital CMOS integrated Circuits,"** NSF Millimeter-wave RCN, University of Wisconsin-Madison, Madison, WI, July 19-20 2017.

[C120]. Y. Li, **D. Psychogiou**, Ch. **Hafner, and C. Hierold, "Large deflection vertical comb**-drive actuators for phase shifter applic**ations," Nano**-Tera.ch Joint Switzerland-Korea Symposium on Novel trends at the frontier of computing and electronics, EPFL, Lausanne, Switzerland, May 2013.

[C121]. Y. Li, S. Kühne, **D. Psychogiou, J. Hesselbarth, and C. Hierold, "Large deflection actuator for vari**able-ratio **RF MEMS power divider," Industry Day 2010, Micro and Nano Science Platform, ETH Zurich, Switzerland,** Sep-2010.

- **Patent applications**

[A1]. **D. Psychogiou** and A. Ashley**, "**Non-reciprocal bandpass filters using transistor-based resonators**,"** Filed on Oct. 1st 2020.

[A2]. **D. Psychogiou and D. J. Simpson, "Tunable RF differential/balanced filters,"** Filed on Sept. 13th 2020.

[A3]. J. Hesselbarth and **D. Psychogiou, "Waveguide-MEMS Phase Shifter," Int. Pub. Number:** WO/2012/15528423-A1, Nov-2012.

WORKSHOPS

[W1]. R. Gómez-García and **D. Psychogiou**, **"**Avoiding RF Isolators: Reflectionless Microwave Filtering Components for Advanced RF Front-Ends**", in 202**1 IEEE Radio and Wireless Symposium (RWS), San Diego, CA, USA, Jan. 17-20, 2021.

[W2]. R. Gómez-García and **D. Psychogiou, "**Modern tunable filtering components with multi-functional and multi-configurable capabilities**",** in 50th European Microwave Conference (EuMC), 2020, Utrecht, Netherlands, 13-18 Sept. 2020.

[W3]. R. Gómez-García and **D. Psychogiou, "Advanced planar and SIW**-based filtering architectures with reflection-less and multi-**configuration capabilities",** in 49th European Microwave Conference (EuMC), 2019, Paris, France, 1-3 Oct. 2019.

[W4]. **D. Psychogiou** and Z. Popovic, **"CAD for biased and self**-biased magnetic non-reciprocal device**s",** in IMS 2019, 2019, Boston, USA, 2-7 June 2019.

[W5]. W. Allen and **D. Psychogiou, "Advances in the design and control of RF filters with multiple levels of transfer function reconfigurability",** in 48th European Microwave Conference (EuMC), 2018, Madrid, Spain, 23-28 Sept. 2018.

[W6]. R. Gómez-García and **D. Psychogiou, "Reflectionless and hig**hly-reconfigurable filtering devices with static **couplings",** in 48th European Microwave Conference (EuMC), 2018, Madrid, Spain, 23-28 Sept. 2018.

[W7]. R. Gómez-García and **D. Psychogiou,** "New concepts for absorptive RF filtering and coupling-less RF tuning**",** in IMS 2018, 2018, Philadelphia, USA, 10-15 June 2018.

[W8]. **D. Psychogiou**, R. Gómez-García **and D. Peroulis,** "Filter developments for next generation wireless communications systems**",** in IMS 2017, 2017, Hawaii, USA, 4-9 June 2017.

[W9]. **D. Psychogiou**, R. Gómez-**García and D. Peroulis, "Hybrid acoustic**-wave-microwave-resonator technologies for high-**performance microwave filters",** in IMS 2017, 2017, Hawaii, USA, 4-9 June 2017.

[W10]. R. Gómez-García, **D. Psychogiou and D. Peroulis, "Single/multi**-band power-distribution and impedance-**transformation planar circuits with added static and reconfigurable bandpass filtering functionality",** in 46th European Microwave Conference (EuMC), 2016, London, UK, 3-7 Oct. 2016.

SHORT COURSES

[SC1]. D. Peroulis, R. Gómez-García and **D. Psychogiou, "Coupling**-matrix-based design of RF/microwave **filters",** in EUMW 2018, Spain, 23-28 Sept. 2018.

[SC2]. D. Peroulis, R. Gómez-García and **D. Psychogiou,** "Coupling-matrix-based design of RF/microwave filters**",** in IMS 2017, Hawaii, USA, 4-9 June 2017.

SEMINARS, WEBINARS AND PANELS (partial list)

[S1]. **D. Psychogiou, "Low SWaP**-C RF front-ends enabled by tunable RF filters and RF co-designed **components", XILINX Webinar series, 11**th of June 2021.

[S2]. **D. Psychogiou, "Multifunctional RF front**-ends enabled by highly-versatile RF filters & co-designed front-**end chains", Webinar to the UCC's association of Chinese Universities, 27**th of May 2021.

[S3]. **D. Psychogiou, "Multifunctional RF front**-ends enabled by tunable RF filters & RF co-**design", UC Boulder** Faculty Seminar, 24th of September 2019.

[S4]. **D. Psychogiou, "Highly**-versatile RF transceivers enabled by tunable filters and RF co-designed **components", Faculty Seminar of the University of Delft, 2nd of July 2019.**

[S5]. **D. Psychogiou, "Highly**-versatile RF transceivers enabled by tunable filters and RF co-**designed passives",** University of Birmingham Faculty Seminar, 1st of July 2019.

[S6]. **D. Psychogiou, "Highly**-versatile RF transceivers enabled by co-**designed antenna interfaces", UC Cork** Faculty Seminar, 26th of June 2019.

[S7]. D. Psychogiou, **"Highly**-versatile RF transceivers enabled by co-**designed antenna interfaces", Webinar** Series of the University of Magdeburg, 13th of June 2019.

[S8]. **D. Psychogiou, "Recent advances in reconfigurable RF passive components", Webinar Series of the** University of Bristol, 15th of May 2019.

[S9]. **D. Psychogiou, "Inspiring the next generation of women engineers", Women in Microwaves Panel Session,** 8th of June, 2017, IEEE International Microwave Symp. 2017, Honolulu, HI, USA. (***Invited Panelist)***

[S10]. D. Psychogiou, **"Adaptive RF front**-ends, Colorado Electromagnetics Meeting, 10th of March 2017, University of Colorado at Boulder, USA.

[S11]. **D. Psychogiou, "Adaptive RF filters, Research Blitz Meeting, 10th of March 2017, University of Colorado** at Boulder, USA.

[S12]. D. Psychogiou, **"Highly**-adaptive and multi-functional RF passive filtering components for enhanced radio **spectrum access", Fall 2016 Seminar Series, 14th October 2016, Texas Tech University, Lubbock, Texas, USA.** (***Invited***)

[S13]. **D. Psychogiou, "Adaptive transfer function RF filters for emerging wireless systems", ECE Seminar,** 4h, March 2016, University of North Texas, USA.

[S14]. **D. Psychogiou, "Adaptive transfer function RF filters for emerging wireless systems", ECE Seminar,** 17th, March 2016, Michigan State University, USA.

[S15]. D. Psych**ogiou, "Adaptive transfer function RF filters for emerging wireless systems", ECE Seminar,** 23rd, February 2016, University of Colorado, USA.

[S16]. **D. Psychogiou, "Adaptive transfer function RF filters for emerging wireless systems", ECE Seminar,** 14th, February 2016, University of Minnesota, USA.

[S17]. **D. Psychogiou, "Adaptive transfer function RF filters for emerging wireless systems", ECE Seminar, 8th,** February 2016, Northeastern University, USA.

[S18]. **D. Psychogiou, "Adaptive transfer function RF filters for emerging wireless systems", ECE Seminar,** 2nd, February 2016, University of Central Florida, USA.

[S19]. **D. Psychogiou, "RF-MEMS reconfigurable filters", Seminar in Electromagnetics, 27th of February 2013,** ETH Zurich, Switzerland.

[S20]. **D. Psychogiou, "Waveguide**-mounted RF MEMS for tunable W-**band analogue type phase shifters",** Seminar on Micro and Nanosystems, 6th of June 2012, ETH Zurich, Switzerland.

AWARDS AND HONORS

- **Awards with mentored students and fellowships**

[SA1]. 2nd Best Student Paper Award for mentored PhD Student A. Ashley for the paper **"**MMIC GaAs X-band isolator with enhanced power transmission response**," in 202**1 IEEE Radio and Wireless Symposium (RWS), San Diego, CA, USA, Jan. 17-20, 2021.

[SA2]. EuMW 2020 travel grant for mentored PhD student D. Simpson for the 2020 EuMC Jaarbeurs Utrecht, Netherlands.

[SA3]. EuMW 2020 travel grant for mentored PhD student A. Ashely for the the 2020 EuMC Jaarbeurs Utrecht, Netherlands.

[SA4]. 2020 ECEE Gold Research Excellence Award for PhD student Andrea Ashley for her PhD thesis research.

[SA5]. National Defense Science and Engineering Graduate Fellowship (3 years) for mentored PhD student Paige Danielson to pursue a PhD thesis on "Efficient broadband multibeam GaN MMIC transceiver arrays".

[SA6]. Second place award in the **"Four**-Channel Switchable/Reconfigurable Filter Bank Design Competition**",** 2019 IEEE IMS, Boston, MA. Mentored PhD students: Andrea Ashley and Dakotah Simpson.

[SA7]. 2019 ECEE Gold Research Excellence Award for PhD student Andrea Ashley for her PhD thesis research.

[SA8]. 2019 ECEE Gold Teaching Excellence Award for MS student Sadasivan for the ECEN 2420 class.

[SA9]. Lockheed Martin Corporation Endowed Graduate Fellowship for PhD student Dakotah Simpson.

[SA10]. EuMW 2019 travel grant for mentored PhD student D. Simpson to present his paper in the 2019 EuMC conference, Paris, France.

[SA11]. Young Engineering Price with mentored PhD student A. Ashley **"Frequency selective ferrite circulators** with quasi-**elliptic transmission response," 2018 European Microwave Conference (EuMC), Madrid, Spain.**

[SA12]. First place award in **the "Filter Design Competition", 2018 EuMC, Madrid, Spain.** Mentored PhD students: Andrea Ashley and Dakotah Simpson.

[SA13]. First place award in **the "Tunable Filter Design Competition", 2018 IEEE IMS, Philadelphia, PA.** Mentored PhD students: Andrea Ashley and Dakotah Simpson.

[SA14]. National Defense Science and Engineering Graduate Fellowship (3 years) for mentored PhD student **Andrea Ashley to pursue a PhD thesis on "Integration of RF Passive Devices through Non**-Reciprocal **Material".**

[SA15]. 2018 ECEE Gold Research Excellence Award for PhD student Dakotah Simpson for his PhD thesis research.

[SA16]. 2018 ECEE Gold Teaching Excellence Award for MS student Sadasivan for the ECEN 2420 class.

[SA17]. 2018 IEEE Microwave Theory and Techniques Society Graduate Fellowship for mentored PhD student **Dakotah Simpson for his research on "Fully**-reconfigurable RF filters for multifunctional and multi-standard RF front ends.

[SA18]. Second place award in **the "RF Filter Design C**ompetition, 2017, IEEE IMS, Honolulu, HI. Mentored BS/MS students: M. Cullen, P. Zurek and M. Robinson.

[SA19]. First place award in the **"RF MEMS Filter Design C**ompetition, 2015, IEEE IMS, Phoenix, AZ. Mentored PhD students: Mark Hickle and Jin Li.

[SA20]. First place award for co-**authored paper with PhD student K. Zeng"** A VHF tunable lumped-element filter with mixed electric-magnetic couplings**"**, 2015 IEEE Wireless and Microwave Technology Conference (IEEE WAMICON), Cocoa Beach, FL.

[SA21]. First place award in **the "RF MEMS Filter Design C**ompetition, 2014 IEEE IMS, Tampa, FL. Mentored PhD students: Mark Hickle and Jin Li.

- **Other awards**

[AW1]. URSI Young Scientist Award, 2020.

[AW2]. National Science Foundation (NSF) CAREER Award, 2020.

[AW3]. Young Engineering Price for co-authored paper with PhD **student A. Ashley "Frequency selective ferrite** circulators with quasi-**elliptic transmission response," 2018 European Microwave Conference, Madrid, Spain.**

[AW4]. Outstanding Junior Faculty Award, Department of Electrical and Computer Engineering, University of Colorado at Boulder, 2017.

[AW5]. **Third Place Award for the Demo "Real**-time jammer suppression using evanescent-**mode cavity filters",** 2015 IEEE Radio Wireless Week, San Diego, CA, USA, Jan. 2015

FUNDED PROJECTS

- **Research funding**

[P1]. DARPA Wideband RF Protection (WARP) (subcontract under Indiana Microelectronics), Feb. 2020-Jan. 2024, Role: PI (100% for D. Psychogiou).

[P2]. N**ational Science Foundation, "CAREER: RF Co**-Designated Fully-Directional Antenna Interfaces for **Dynamic and Efficient Spectrum Access",** Feb. 2020-Jan. 2025, Role: PI (100% for D. Psychogiou).

[P3]. **Office of Naval Research, "GaN Transmitters with 5D** Reconfigurability, July 2019-Nov. 2022. Role-Co-PI (25% for D. Psychogiou)

[P4]. **Indiana Microelectronics, "3D Glass Frequency-Selective Devices",** May 2019-Dec. 2020, Role: PI (100% for D. Psychogiou)

[P5]. **Harris Corporation, "Widely Reconfigurable Cavity-Based Filters"**, Oct. 2018-Feb.2023, Role: PI (100% for D. Psychogiou)

[P6]. **Lockheed Martin, "Frequency Selective Feeds"**-Phase II, Jan.2019-Dec. 2020, Role: PI (100% for D. Psychogiou).

[P7]. Department of the Air Force, Air Force Research Laboratory (AFRL), STTR Program (subcontract under IM), **"Radio Frequency (RF) Filter Tuning Element"**, Role: PI (100% for D. Psychogiou), Aug. 2018-May 2019.

[P8]. **Lockheed Martin, "Differential Adaptive RF Filters"**-Phase I, Jan. 2018-June 2020, Role: PI (100% for D. Psychogiou).

[P9]. **National Science Foundation, "Power and Spectral Efficiency enabled by RF Co**-Designed Electrically-**Adaptive Front Ends",** Sept. 2017-Aug.2020, Role: PI (75% for D. Psychogiou).

[P10]. Lockheed Mar**tin, "Broadband antenna feeding networks (BFA)"**, July 2017-June 2018, Role: PI (100% for D. Psychogiou).

[P11]. **Innovative Seed Grant, University of Colorado at Boulder, "Microfluidically**-tuned 3D printed waveguides, , July 2017-Dec 2019, Role: PI (100 % for D. Psychogiou)

[P12]. Defense Advanced Research Project Agency-DARPA- **(subcontract under QORVO), "Magnetic Integrated** Circuits for RF **Front Ends"**, March 2017-March 2019, Role: Co-PI (50% for D. Psychogiou).

[P13]. **Lockheed Martin, "Dynamic broadband radiating element matching for phased arrays",** Oct. 2016-April 2018, Role: PI (80% for D. Psychogiou).

- **Instrumentation research funding**

[P14]. Office of Naval Research, Defense University Research Instrumentation Program (DURIP) "Reconfigurable Dynamic Measurement System for Adaptive RF to Millimeter-Wave Circuits", June 2018-July 2019, Role: Co-PI (33.3% for D. Psychogiou)

- **Educational donations**

[P15]. Advanced Design System software—52 license bundle 2016-2020 at UC Boulder

TEACHING EXPERIENCE

- **Teaching at the University of Colorado Boulder**

Undergraduate classes:

1. Electronics for Wireless Systems (ECEN 2420), Spring 2017-2020
2. Independent Study for Undergraduates (ECEN 4840), Fall 2016- Spring 2020

Graduate classes:

1. Computer Aided Microwave Design (ECEN 5104), Fall 2016-2019
2. Independent Study for Graduates (ECEN 5840), Fall 2016-Spring 2020

- **Teaching assistantships at ETH Zurich**

1. Advanced Antennas (227-0453-00 G), Fall 2010-2011, ETH Zurich.
2. Antennas and Propagation (227-0114-00 G), Spring 2009-2011, ETH Zurich.
3. Electromagnetic Fields and Components I (227-0453-00 V), Spring 2009, Fall 2010, ETH Zurich.

- **Instructor of laboratory experiments & practical training projects at ETH Zurich and Purdue**

1. Antennas and waves, Fall 2009 - Spring 2012, ETH Zurich.
2. Antenna arrays, Fall 2009 - Fall 2012, ETH Zurich.
3. Transmission lines, Fall 2009 - Fall 2012, ETH Zurich.
4. Experiments for RF and Microwave Wireless components (ECE 595), Spring 2015, Purdue University.
5. Antenna tower Uetliberg, Fall 2009 – Spring 2011, ETH Zurich.
6. Earth Moon Earth Communication, Spring 2011, ETH Zurich.
7. Smart Antennas, Spring 2010, ETH Zurich.

SUPERVISED RESEARCH

- **PhD students**

1. **K. Zhao, "Multi**-octave tunable RF devices, Current, expected graduation, in 2023.
2. **P. Danielson, "Ridge**-waveguide microwave components, Current, expected graduation, in 2024 (Co-advised with Z. Popovic, UC Boulder).
3. **D. Simpson, "RF adaptive** differential filters, Current, expected graduation in 2021.
4. **A. Ashley, "Non-reciprocal RF components using magnetic nanowires", Current**, expected graduation in 2021.
5. **W. Wang, "Tunable absorptive** bandstop-to-all-pass filter synthesis, control, application and optimization", ***Completed***, February 2019 (Co-advised with Prof. D. Peroulis, Purdue University).
6. R. Loeches-**Sánchez, "Advanced microwave filtering devices based on** signal-**interference techniques"**, ***Completed***, May 2016 (Co-advised with Prof. R. Gómez-García, University of Alcala, Spain).

- **Master students**

1. A. Dyussembayev, "Liquid metal helical filters", ***MS-Thesis Degree***, Spring 2020-Spring 2021.

2. **M. Schoomaker, "Non**-uniform frequency-selective feed networks**"**, ***MS-Thesis Degree***, Summer 2019-Spring 2020.
3. **K. Sadasivan, "Low-cost tunable filters"**, ***MS-Thesis Degree***, Spring 2019, University of Colorado at Boulder.
4. **S. Sawant, "Broadband four-element antenna array", Fall 2018**-Fall 2020, ***Non-Thesis MS Degree***, University of Colorado at Boulder.
5. **A. Gutsul, "RF-MEMS reconfigurable filters for millimeter wave applications",** ***MS-Thesis Degree***, Spring 2012 (Co-advised with Prof. Ch. Hafner, ETH ZURICH).
6. M. Spu**hler, "Design of a cavity** filter based on surface mount dual-**mode resonators",** ***MS-Thesis Degree***, Fall 2010 (Co-advised with Prof. Ch. Hafner, ETH ZURICH).
7. O. Schu**lthes, "Switched antennas with reconfigurable radiation pattern",** ***MS-Thesis Degree***, Fall 2009 (Co-advised with Prof. R. Vahldieck and Prof. J. Hesselbarth, ETH ZURICH).

- **Visiting graduate students**

1. **M. Kong, "**Wideband-**balanced filters"**, PhD student at Beijing University Posts and Telecommunications, Fall 2019-Spring 2020.

- **Undergraduate research students**

1. Jeremy Webb**, "**Glass-based dual-band filters, Summer 2020-Summer 2021, University of Colorado at Boulder
2. **Rory O'Donovan, "Tune**-all hybrid microstrip/lumped-element filters, May 2021-Sept. 2021, University College Cork.

- **Independent-research projects for graduate students**

1. K. Zhao, **"**IC-**integrated BPF/BSFs modules"**, Spring 2020-Summer 2020
2. **D. Mitchell, "3D**-printed transmission lines**"**, Fall 2020-Summer 2020 (Co-advised with D. Filipovic), University of Colorado Boulder.
1. **A. Krahl, "Integrated MMIC** bandstop filter**"**, Fall -Spring 2020, University of Colorado Boulder
2. **A. Dyussembayev, "3D printed helical resonators", Spring 2020**-Fall 2020, University of Colorado Boulder.
3. **D. Simpson, "Spatio**-temporarily-**modulated bandpass filters", Fall 2019, University of Colorado at Boulde**r.
4. **G. Andersen, "Quasi-elliptic acoustic filters", Fall 2019, University of Colorado at Boulder.**
5. **A. Ashley, "RF-switched filter bank", Spring 2019, University of Colorado at Boulder**.
6. **M. Deng, "**SIW tune-all filters**", Fall 2018**-Summer 2019, University of Colorado at Boulder.
7. **N. Luhrs, "CAD modeling of FBAR-based filters", Spring 2018**-Fall 2018, University of Colorado at Boulder.
8. **S. Sawant, "**Broadband four-element antenna array**", Fall 2018, University of Colorado at Boulder.**
9. **N. Sonth, "Harmonic** front-**end design", Spring 2018**, University of Colorado at Boulder.
10. **K. Sadasivan, "RF characterization of RF printed cavities", Spring 2018**, University of Colorado at Boulder.
11. **F. Akhatar, "Microwave CAD", Fall 2017**, University of Colorado at Boulder.
12. C. Gay, **"**Cavity resonators**", Fall 2017**, University of Colorado at Boulder.
13. B. Baker**, "Active L-band circulators", Fall** 2017, University of Colorado at Boulder.
14. **M. Cullen, "Broadband half**-space antennas**",** Spring 2017, University of Colorado at Boulder.
15. D. **Borah, "Dual-band differential filter", Spring 2017**, University of Colorado at Boulder.
16. **A. Bodi, "3D printed cavity resonator", Fall 2016, University of Colorado at Boulder.**
17. **J. Williams, "Inter**-resonator coupling structures for adaptive RF-**filters", Fall 2**013-Spring 2014, Purdue University (Co-advised with Prof. D. Peroulis, Purdue University).
18. **R. Mao, "Widely tunable cavity resonators", Fall 2013**-Spring 2015, Purdue University (Co-advised with Prof. D. Peroulis, Purdue University).
19. **J. Li, "Tunable MEMS**-bas**ed RF filters", Fall 2013**-Fall 2015, Purdue University (Co-advised with Prof. D. Peroulis, Purdue University).
20. **K. Zeng, "Lumped-element field programmable filter arrays", Spring 2014**-Spring 2016, Purdue University (Co-advised with Prof. D. Peroulis, Purdue University).

- **Independent-research projects for undergraduate students**

1. **A. Ahonen, "Switchable cavity resonators"**, Spring 2020, University of Colorado Boulder
2. **A. Payan, "Liquid**-metal tuned resonators**"**, Summer-Fall 2019, DLA Program, University of Colorado Boulder
3. **H. Cai, "Comparator circuits", Summer 2019, University of Colorado Boulder**
4. **H. Shahba, "Fluidic**-based transmission lines**"**, Summer 2019, SPUR Program, University of Colorado Boulder
5. **A. Alba, "Ferrofluid**-based resonators**"**, Summer 2019, Smart Program, University of Colorado at Boulder
6. **P. Touzong, "Deployable resonators", Spring 2019, University of Colorado at Boulder.**
7. **A. Kahn, "RF limiters", Spring 2019, University of Colorado at Boulder.**
8. **V. Contreras, "Differential acoustic filter"**, Summer 2018, Smart Program, University of Colorado at Boulder
9. **S. Williams, "Multi**-band lumped-element filters**"**, Summer 2017, Fall 2017, University of Colorado at Boulder
10. **J. Rosario, "RF** filtering power dividers**"**, Summer 2017, Smart Program, University of Colorado at Boulder
11. **Q. Than, "Broadband differential filter", Spring** 2017, University of Colorado at Boulder.
12. A**. Wylde, "Broadband antenna networks", Spring 2017, University of Colorado at Boulder.**
13. **D. Brukwinski, "Signal-interference bandpass filter", Fall** 2016, University of Colorado at Boulder.
14. **S. T. Sharkey, "Acoustic**-wave resonator-based **diplexers", Fall 2015, Purdue University (Co**-advised with Prof. D. Peroulis, Purdue University).
15. **Z. Vander Missen, "Gas discharge enabled tunable RF devices", Fall 2015**, Purdue University (Co-advised with Prof. D. Peroulis, Purdue University).

SERVICE & MEMBERSHIPS

- **Significant Professional Service Appointments**

09/2020-today	**Associate Editor** EuMA International Journal of Wireless and Microwave Technologies
07/2018-today	**Associate Editor** IEEE Microwave Wireless Component Letters
08/2015-03/2019	**Associate Editor** IET Microwave Antennas and Propagation
01/2021-today	**Chair** IEEE MTT-S Microwave Control Materials and Devices Committee (MTT-13)
06/2019-12/2020	**Vice-Chair** IEEE MTT-S Microwave Control Materials and Devices Committee (MTT-13)
01/2017 – today	**Secretary** USNC-URSI, Commission D: Electronics and photonics
01/2018 – today	**Awards Committee** IEEE MTT-S Transactions in Microwave Theory and Techniques Journal

- **Review Boards of International Journals**

IEEE Transactions on Microwave Theory and Techniques (TMTT)
IEEE Microwave and Wireless Components Letters (MWCL)
IEEE Transactions on Circuits and Systems I & II (TCAS I, II)
IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control (UFFC)
IEEE Transactions on Components, Packaging and Manufacturing
IEEE Transactions on Industrial Electronics
IEEE Proceedings
IEEE ACCESS
IET Electronic Letters
IET Microwaves Antennas and Propagation (MAP)
ELSEVIER Microelectronics Journal (MEJ)
ELSEVIER Sensors and Actuators A: Physical
Progress in Electromagnetic research (PIER)

International Journal of Microwave and Wireless Technologies, Cambridge University Press

- **Review Boards of International Conferences**

IEEE International Microwave Symposium—IMS—(2017-2021):
- **Subcommittee "Planar filters".**

EuMA European Microwave Conference—EuMC—(2015-2020):
- Subcommittee **"Non-planar filters and multiplexers".**
- **Subcommittee "Non-Planar Passive Components and Circuits".**
- **Subcommittee "Emerging Materials and Technologies".**

IEEE Radio and Wireless Symposium—RWS—(2015-2020):
- **Subcommittee "Passive components and packaging".**

IEEE Radio and Wireless Symposium—RWS—(2017):
- **Subcommittee "Invited papers and special session".**

IEEE Radio and Wireless Symposium—RWS—(2016, 2018):
- **Subcommittee "Late-news papers"**

IEEE MTT-S Int. Microwave Workshop Series Advanced Material and Processes—IMWS-AMP—(2018):
- **Subcommittee "RF-passives"**

IEEE Texas Symposium on Wireless and Microwave Circuits and systems—TXWMS—(2017-2020):
- **Subcommittee "RF-passives"**

IEEE Wireless and Microwave Technology Conference—WAMICON—(2016-2019):
- **Subcommittee "RF-passives"**

IEEE International Symposium on Circuits and Systems—ISCAS—(2017-2019):
- **Subcommittee "RF-circuits"**

IEEE International Midwest Symposium on Circuits and Systems—MWSCAS—(2017):
- **Subcommittee "RF-circuits"**

IEEE International Conference on Microwaves, Communications, Antennas and Electronics Systems—COMCAS—(2016-2019):
- **Subcommittee "RF-passives and filters"**

IEEE AFRICON—(2017):
- **Subcommittee "Electromagnetics, Antennas and Optics"**

USNC-URSI National Radio Science Meeting, 2017-2019.
- **Subcommittee "Filters and Tunable Matching Networks**

ACES International Applied Computational Electromagnetics Society (ACES) Symposium—ACES—(2018):
- **Subcommittee "**Reconfigurable RF/Microwave Electronics for 5G Communication Systems**"**

International Workshop on Microwave Filters—IWMF—(2018):
- **Subcommittee "**Planar Filters and Multiplexers**"**

- **Chair/Co-Chair of International Conference Sessions**

[S1]. Session EuMC50: **"Compact planar filtering devices"**, in 50th European Microwave Conference (EuMC), 2021, Jaarbeurs Utrecht, NL, 10-15 Jan. 2021.—Role: Co-Chair—

[S2]. Session We2A: "Substrate-integrated waveguide bandpass filters, in 2018 IEEE International Microwave Symp, Boston, MA, USA, June. 2-7, 2019—Role: Chair—

[S3]. Session We2E: "Recent advances in compact and high-performance planar filter design and realization, in 2020 IEEE International Microwave Symp, Los Angeles, CA, USA, Aug. 4-6, 2020—Role: Chair—

[S4]. Session TH-**A1.2A: "Microstrip Antenna Arrays I"**, in 2019 IEEE International Symp. On Antennas and Propagation and USNC-URSI Radio Science Meeting, Atlanta, GA, 08:00-11:40, USA, July 7-12, 2019—Role: Chair—

[S1]. **Session TU2D: "Resonator and Filter Design"**, in 2020 IEEE Radio Wireless Symp., San Antonio, TX, USA, 15:40h–17:20h, Jan. 17, 2018.—Role: Co-Chair—

[S5]. **Session We3A: "Substrate**-Integrated Waveguide Bandpass Filters**"**, in 2019 IEEE International Microwave Symp, Boston, MA, USA, June 2-7, 2019—Role: Chair—

[S2]. **Session TU4B: "Novel Resonator and Filter Designs"**, in 2019 IEEE Radio Wireless Symp., Orlando, FL, USA, 15:40h–17:20h, Jan. 22, 2019.—Role: Co-Chair—

[S3]. Session D2-**1: "Microstrip and Printed Devices and Antennas"**, in USNC-URSI National Radio Science Meeting, Boulder, CO, USA, 8:20h–10:00h, Jan. 11, 2019.—Role: Chair—

[S6]. Session TH-**SP.2A: "Reconfigurable RF ci**rcuits for wideband antenna systems**"**, in 2018 IEEE International Symp. On Antennas and Propagation and USNC-URSI Radio Science Meeting, Boston, MA, USA, July 8-13, 2018—Role: Co-Chair—

[S4]. **Session We2C: "Filter Tuning, Synthesis, and Innovative Coupling Realiz**ations**"**, in International Microwave Symp., Philadelphia, PA, USA, 10:10h–11:50h, June 17, 2018.—Role: Chair—

[S5]. **Session MO3B**: **"Passive Devices I"**, in 2018 IEEE Radio Wireless Symp., Anaheim, CA, USA, 13:30h–14:50h, Jan. 17, 2018.—Role: Co-Chair—

[S6]. Session D2-1: **"Filters and Tunable Microwave Circuits"**, in USNC-URSI National Radio Science Meeting, Boulder, CO, USA, 8:20h–12:00h, Jan. 6, 2018.—Role: Chair—

[S7]. Session B15-**1: "Antenna Arrays"**, in USNC-URSI National Radio Science Meeting, Boulder, CO, USA, 13:30h–17:00h, Jan. 6, 2018.—Role: Chair—

[S8]. **Session TH4C: "Multi**-mode, multi-band and multi-**layer filters"**, in 2017 IEEE International Microwave Symp., Honolulu, HI, USA, 15:40h–17:00h, June 8, 2017.—Role: Co-Chair—

[S9]. Session MO1B**: "**Advanced Reconfigurable RF/Microwave Electronics**"**, in 2017 IEEE Radio Wireless Symp., Phoenix, AZ, USA, 08:00h–09:20h, Jan. 16, 2017.—Role: Co-Chair—

[S10]. **Session TU4B: "**Passive Components**"**, in 2017 IEEE Radio Wireless Symp., Phoenix, AZ, USA, 15:40h–17:20h, Jan. 17, 20167.—Role: Co-Chair—

[S11]. **Session TU3B: "Passive Components and Packaging"**, in 2016 IEEE Radio Wireless Symp., Austin, TX, USA, 13:30h–15:10h, Jan. 26, 2016.—Role: Co-Chair—

[S12]. **Session MO4A: "Antennas, Arrays & MIMO"**, in 2016 IEEE Radio Wireless Symp., Austin, TX, USA, 15:40h–17:20h, Jan. 25, 2016.—Role: Co-Chair—

- **Organizer/Co-organizer of Workshops**

[W1]. **"**Magnetic materials and devices**," in** 2021 IEEE International Microwave Symp., Atlanta, GA, USA, June 6-11, 2021.—Role: Co-Organizer—

[W2]. **"**RF integrated magnetics, devices, integration and applications**"**, in 2019 IEEE International Microwave Symp., Boston, MA, USA, June 2-7, 2019.—Role: Organizer—

[W3]. **"**Advances towards autonomous filter design**"**, in 48th European Microwave Conference (EuMC), 2018, Madrid, Spain, 23-28 Sept. 2018.—Role: Co-Organizer—

[W4]. **"**Recent advances in non-linear and non-reciprocal RF microwave devices**"**, in 2018 IEEE International Microwave Symp., Philadelphia, PA, USA.—Role: Organizer—

[W5]. **"**Tunable Passive Devices for Multi-band Systems**"**, in 2018 IEEE International Microwave Symp., Philadelphia, PA, USA.—Role: Co-Organizer—

[W6]. **"**Reconfigurable RF/Microwave Passive Components for Emerging Wireless Systems**"**, in 46th European Microwave Conference (EuMC), 2016, London, UK, 3-7 Oct. 2016.—Role: Co-Organizer—

- **Organizer/Co-organizer of Special Sessions**

[S1]. **"**New techniques of modeling and optimization of microwave filters**"**, in 2019 IEEE Numerical Electromagnetic and Multiphysics Modeling Optimization (NEMO), Boston, MA, USA, May 29-31, 201 —Role: Organizer—

[S2]. **"Reconfigurable RF circuits for wideband antenna systems"**, in 2018 IEEE International Symp. On Antennas and Propagation and USNC-URSI Radio Science Meeting, Boston, MA, USA, July 8-13, 2018—Role: Co-Organizer—

[S3]. **"Reconfigurable RF/Microwave Electronics for 5G Communication Systems"**, in 2018 ACES, Denver, CO, USA, March 24-29, 2018—Role: Organizer—

[S4]. **"**Reconfigurable RF/Microwav**e Electronics"**, in 2017 IEEE Radio Wireless Symp., Phoenix, AZ, USA, Jan 15-18, 2017.—Role: Co-Organizer—

- **Reviewer of proposals**

[P1]. CU Seeds grants, Spring 2018
[P2]. National Research Foundation (NRF), South Africa, Summer 2020

- **Service at University of Colorado at Boulder**

[S1]. Graduate committee, Fall 2016-Summer 2020
[S2]. Staff hiring committee, Fall 2018-Summer 2020
[S3]. Preliminary exams committee for the EM and RF area of ECEN, Fall 2016-Summer 2020
[S4]. PhD thesis committee > 20 PhD students at CU Boulder.
[S5]. Mentor, Goldshirt Program of BOLD center, Spring 2017-Summer 2020
[S6]. Mentor, SMART Program of CU Boulder, Summer 2017-Summer 2020
[S7]. Admissions reviewer, Goldshirt Program of BOLD center, Spring 2017-2018
[S8]. Multifunctional Material IRT, College of Engineering, Fall 2018-Summer 2020

- **Outreach & engagement with women and under-represented students**

[O1]. Presenter at the Aerospace Venture Days of OIC at CU Boulder, Fall 2016-today
[O2]. Lab tours and demos for the UCB Access Summer Series program for middle school students
[O3]. Short course on CAD design of filters for RF engineering professionals
[O4]. Mentored Ana Alba, Veronica Contreras, Megan Robinson, Samantha Williams, Hannan Shahbah, Andrea Ashley, Jonathan Rosario-de-Jesus, Abraham Payan, Farah Akhatar, Dubari Borah.

- **Professional memberships**

IEEE Senior Member, since 2019
URSI Senior Member, since 2020
IEEE MTT-S Microwave Control Materials and Devices Committee (MTT-13), elected member since 2017
IEEE MTT-S Filters and Passive Components Committee (MTT-8), elected member since 2018
IEEE Microwave theory and Techniques Society (MTTS)
IEEE Antennas and Propagation Society (APS)
IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society
IEEE Women in Engineering (WIE)
European Microwave association (EUMA)
Colorado Electromagnetics Group

OTHER EDUCATION

- **Continuous education**

Certification of Teaching in Higher Education, University of Loughborough, Loughborough, UK

- **Languages**

Greek, Mother Tongue
English, Proficient
German, Intermediate
French, Intermediate