
Rui Paulo da Silva Martins

Curriculum Vitæ

September 2020

Short Biography



Rui P. Martins (IEEE Member'88 – Senior Member'99 – **Fellow'08**), born in April 30, 1957, received the Bachelor, Masters, and Ph.D. degrees, as well as the *Habilitation* for Full-Professor in Electrical Engineering and Computers from the Department of Electrical and Computer Engineering (DECE), Instituto Superior Técnico (IST), U. of Lisbon, Portugal, in 1980, 1985, 1992 and 2001, respectively. He has been with the DECE / IST, U. of Lisbon since October 1980.

Since Oct. 1992, has been on leave from U. of Lisbon and with the DECE, Faculty of Science and Technology (FST), University of Macau (UM), Macao, China, where he is a Chair-Professor since Aug. 2013. In FST, he was Dean (1994-1997), and has been UM's Vice-Rector since Sep. 1997. From Sep. 2008 to Aug. 2018, Vice-Rector (Research) and from Sep. 2018 to Aug. 2023, Vice-Rector (Global Affairs). Within the scope of his teaching and research activities he has taught 21 bachelor and master courses and, in UM, has supervised (or co-supervised) 47 theses, Ph.D. (26) and Masters (21). Authored or Co-authored: 7 books and 12 book chapters; 36 Patents, USA (32), Taiwan (3) & China (1); 567 papers, in scientific journals (220) and in conference proceedings (347); as well as other 66 academic works, in a total of 688 publications. He created in 2003 the *Analog and Mixed-Signal VLSI Research Laboratory* of UM, elevated in January 2011 to State Key Laboratory (SKLAB) of China (the 1st in Engineering in Macao), being its Founding Director. He was the Founding Chair of UMTEC (UM company) from January 2009 to March 2019, supporting the incubation and creation in 2018 of *Digifluidic*, the first UM Spin-Off, whose CEO is a SKLAB PhD graduate. He was also a co-founder of Chipidea Microelectronics (Macao) [now Synopsys-Macao] in 2001/2002.

Prof. Rui Martins is an *IEEE Fellow*, was Founding Chair of IEEE Macau Section (2003-2005) and IEEE Macau Joint-Chapter on Circuits And Systems (CAS) / Communications (COM) (2005-2008) [*2009 World Chapter of the Year of IEEE CAS Society (CASS)*], General Chair IEEE Asia-Pacific Conference on CAS – *APCCAS'2008*, Vice-President (VP) Region 10 (Asia, Australia and Pacific) (2009-2011) and VP-World Regional Activities and Membership of *IEEE CASS* (2012-2013), Associate-Editor of *IEEE Transactions on CAS II: Express Briefs* (2010-2013), nominated *Best Associate Editor* (2012-2013). He was also member of: *IEEE CASS* Fellow Evaluation Committee (2013, 2014, 2018 – Chair, 2019 and 2021 – Vice-Chair); *IEEE* Nominating Committee of Division I Director (CASS/EDS/SSCS) (2014); and *IEEE CASS* Nominations Committee (2016-2017). Plus, he was General Chair of ACM/IEEE Asia South Pacific Design Automation Conference – *ASP-DAC'2016*, receiving the *IEEE Council on Electronic Design Automation (CEDA) Outstanding Service Award in 2016*, and also General Chair of the IEEE Asian Solid-State Circuits Conference – *A-SSCC 2019*. He was also Vice-President (2005-2014) and President (2014-2017) of the *Association of Portuguese Speaking Universities (AULP)*, and received 2 Macao Government decorations: the Medal of Professional Merit (Portuguese-1999); and the Honorary Title of Value (Chinese-2001). In July 2010 was elected, unanimously, as Corresponding Member of the Lisbon Academy of Sciences, being the only Portuguese Academician working and living in Asia.

Rui Paulo da Silva Martins

Department of Electrical and Computer Engineering
Faculty of Science and Technology
University of Macau

Age (63)

April 30 **1957**

Born in Arroios, Lisbon, Portugal

Academic Qualifications

Nov 27 **2001**

Habilitation to Full-Professor, Department of Electrical and Computer Engineering (DECE), Instituto Superior Técnico (IST) / Technical University of Lisbon (TU of Lisbon), Portugal.

[Synthesis Lesson: *Advanced CMOS Operational Amplifiers for High-Frequency and Low-Power (Low-Voltage) Filters in Analog/Digital Interfaces*].

Feb 7 **1992**

Doctor of Philosophy in Electrical and Computer Engineering, DECE, IST / TU of Lisbon, Portugal.

[Ph.D. Dissertation: *Multirate Switched-Capacitor Circuits and their High-Frequency Applications*].

Jun 21 **1985**

Master of Science in Electrical and Computer Engineering, DECE, IST / TU of Lisbon, Portugal.

[M.Sc. Thesis: *MOS Operational Amplifiers for Switched-Capacitor Filters*].

Sep 30 **1980**

Bachelor of Electrical Engineering (5-years), DECE, IST / TU of Lisbon, Portugal.

Academic Career

Jan 1	2019	Current Term	Director , <i>Institute of Microelectronics</i> , University of Macau (UM), Macao, China.
		[Dec 31 2021]	
Sep 1	2018	Current Term	Vice-Rector (<i>Global Affairs</i>), University of Macau (UM), Macao, China.
		[Aug 31 2023]	
Aug 16	2013	Current Term	Chair Professor , Department of Electrical & Computer Engineering (DECE), Faculty of Science & Technology (FST), UM (on leave from IST / U of Lisbon).
		[Aug 31 2021]	
Jan 25	2011	Current Term	Director , <i>State Key Laboratory of Analog and Mixed-Signal VLSI</i> , University of Macau (UM), Macao, China.
		[Mar 23 2022]	[http://www.amsv.umac.mo/]
Jul	2010	For Life	Academician , Academy of Sciences of Lisbon, Portugal.
Jul 1	2009	Dec 31 2012	Founder & Acting-Dean , Graduate School, UM.
Sep 1	2001	Aug 31 2002	Founder & Acting-Head , Department of Electrical and Computer Engineering, FST / UM.
[Sep 1	2008	Nov 9 2008	Acting-Rector , University of Macau (UM), Macao, China.]
Sep 1	1997	Dec 12 2018	Vice-Rector (<i>Research</i>), University of Macau (UM), Macao, China [cumulative with VR Global Affairs from Sep.1, 2018].
Feb 17	1998	Aug 15 2013	Full-Professor , Department of Electrical and Computer Engineering (DECE), Faculty of Science and Technology (FST), UM (on leave from IST / TU of Lisbon).
Jul 1	1994	Aug 31 1997	Dean , Faculty of Science and Technology, UM.
Jan 1	1994	Jun 30 1994	Associate Dean , Faculty of Science & Technology, UM.
Nov	1993	Present	Principal Investigator , <i>Microelectronics</i> , DECE / FST / UM [UM Key Research Area since 2008, Founder of <i>UM Analog and Mixed-Signal VLSI Research Lab</i> now a <i>State Key Lab</i>].
Apr 1	1993	Oct 11 1994	Director , Centre of Scientific and Technical Research / FST / UM.
Oct 16	1992	Feb 16 1998	Associate Professor , DEEE / FST / UM.

Feb 7	1992	Oct 15	1992	Assistant/Associate Professor , DECE / IST / TU of Lisbon, Portugal.
Apr 28	1983	Feb 6	1992	Lecturer , DECE / IST / TU of Lisbon, Portugal.
Oct 1	1980	Apr 27	1983	Teaching and Research Assistant , DECE / IST / TU of Lisbon, Portugal.

Awards (Self, with Colleagues or Students & from a Team of former Ph.D. Students) [41]

41.	Oct	2020	[Macao Science & Technology Award] Technology Invention – 1st Prize , “Enabling Internet-of-Everything (IoE) Connectivity with Advanced Electronic Chips”, (Won by Pui-In Mak, Law Man Kay, Jun Yin, Yong Chen and R.P.Martins), Macao, China.
40.	Oct	2020	[Macao Science & Technology Award] Technology Invention – 2nd Prize , “Leading-Edge-Efficiency Data and Power Conversion Integrated Circuit Designs for Emerging Systems”, (Won by Chi-Hang Chan, Yan Zhu, Yan Lu, Sai-Weng Sin and R.P.Martins), Macao, China.
39.	Feb	2018	ISSCC 2018 - Takuo Sugano Award for Outstanding Far-East Paper , (Mo Huang – Post-Doc, 1 st Author), in Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2017 , vol.60, pp.376-377, San Francisco, USA.
38.	Jan	2018	ASP-DAC 2018 - University LSI Design Contest Special Feature Award , (Junmin Jiang – Ph.D. Student, 1 st Author), in Proc. Asia and South Pacific Design Automation Conference - ASP-DAC 2018 , Jeju, Korea.
37.	Jan	2017	IEEE Council on Electronic Design Automation (CEDA), Outstanding Service Award 2016 , Tokyo, Japan.
36.	Oct	2016	[Macao Science & Technology Award] Technology Invention – 2nd Prize , “Multi-Standard Wireless and Multi-Physical-Sensing Chips for Functionality Extension of Next-Generation Smart Mobiles”, (Won by Pui-In Mak and R.P.Martins), Macao, China.
35.	Feb	2016	ISSCC 2016 - Silk-Road Award for a Ph.D. Student from IEEE R-10 , (Ka-Meng Lei – Ph.D. Student, 1 st Author), in Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2016 , vol. 59, pp.474-475, San Francisco, USA.
34.	Nov	2015	A-SSCC 2015 – Distinguished Design Award/Student Design Contest , (Ka-Meng Lei – Ph.D. Student, 1 st Author), in Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2015 , pp.19-1-19-4, Xiamen, Fujian, China.
33.	Nov	2015	TENCON 2015 – Professional Award (Mo Huang – Ph.D Student, 1 st Author), in Proc. IEEE Region 10 Conference - TENCON 2015 , pp.1-4, Macao, China.
32.	Feb	2015	ISSCC 2015 – 2 IEEE SCS Pre-doctoral Achievement Awards , (Zhicheng Lin & Chi-Hang Chan – Ph.D. Students, 1 st Authors), in Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2015 , San Francisco, USA.
31.	Nov	2014	2014 Business Awards of Macau – Innovation Excellence Award , “State Key Lab of Analog and Mixed-Signal VLSI”, Macao, China.
30.	Oct	2014	[Macao Science & Technology Award] Technology Invention – 2nd Prize , “Analog and Radio Frequency Microelectronics Turn-Key Interfaces for Ubiquitous Wireless Connectivity”, (Won by Pui-In Mak, Law Man Kay, R.P.Martins), Macao, China.
29.	Sep	2014	Best Paper Award , in Proc. IEEE European Solid-State Circuits Conference – ESSCIRC’2014 , pp.211-214, Venice, Italy.
28.	Feb	2014	ISSCC 2014 - IEEE SCS Pre-doctoral Achievement Award , (Zushu Yan – Ph.D. Student, 1 st Author), in Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2014 , San Francisco, USA.
27.	Jan	2014	Best Associate Editor for 2012 to 2013 of IEEE Transactions on Circuits and Systems II.
26.	Aug	2013	Best Paper Award , in Proc. IEEE 5th Asia Symposium on Quality Electronic Design - ASQED 2013 , pp.216–219, Penang, Malaysia.

25. [Feb 2013] **[2012 Best Chapter (World) Award] IEEE Solid-State Circuits Society (@ Diamond Jubilee – 60 Years - of ISSCC), IEEE Macau Chapter on SSC, (Won by Chapter Chair Seng-Pan U and Chapter Secretary Sai-Weng Sin, Former Ph.D. Students – Attributed based mainly on the activity of the State Key Laboratory of Analog and Mixed-Signal VLSI)]**
24. Oct 2012 **[Macao Science & Technology Award] Technology Invention – 2nd Prize, “Analog and Mixed- Signal Interface for a Ubiquitous Electronic World”, (Won by R.P.Martins, Seng-Pan U, Pui-In Mak, Sai-Weng Sin), Macao, China.**
23. Jun 2012 **Student Travel Award**, in Proc. IEEE Symposium on VLSI Circuits - VLSI 2012, pp.86-87, Hawaii, USA.
22. [Feb 2012] **[China National Award] Second Class Award of The State Scientific and Technological Progress Award, “The Design & Development of High-Performance Analog & Mixed-Signal IC Technology”, (Won by Seng-Pan U, Pui-In Mak, Sai-Weng Sin – Team of former Ph.D., Master and Bachelor Students), Beijing, China. First-Time a National S&T Award Attributed to Macao]**
21. Nov 2011 **Student Paper Award (Most voted)**, in Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2011, pp.61-64, Jeju, South-Korea.
20. Oct 2011 **Gold Leaf Certificate**, in Proc. IEEE Ph.D. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA'2011, pp.131-134, Macao, China.
19. Oct 2011 **Silver Leaf Certificate**, in Proc. IEEE Ph.D. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA'2011, pp.119-122, Macao, China.
18. Oct 2011 **Bronze Leaf Certificate**, in Proc. IEEE Ph.D. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA'2011, pp.1-4, Macao, China.
17. Feb 2011 **ISSCC 2011 - Silk-Road Award for a Ph.D. Student from IEEE R-10, (He-Gong Wei – Ph.D. Student, 1st Author), in Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2011, pp.188-190, San Francisco, USA.**
16. Jun 2010 **2010 Outstanding Young Author Award**, from IEEE CAS Society (Pui-In Mak – 1st author), in **IEEE Transactions on CAS – Part I: Regular Papers**, vol. 56, No.5, pp.933-942, May 2009.
15. Sep 2009 **Gold Leaf Certificate**, in Proc. IEEE Ph.D. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA'2009, pp.165-168, Shanghai, China.
14. Sep 2009 **Silver Leaf Certificate**, in Proc. IEEE Ph.D. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA'2009, pp.117-120, Shanghai, China.
13. Jun 2009 **Certificate of Merit**, Innovative Entrepreneurship in the Portuguese Diaspora - Award, Lisbon, Portugal.
12. May 2009 **[2009 World Chapter of the Year] IEEE Circuits And Systems Society, IEEE Macau Joint-Chapter on CAS/COM, Founding Chapter Chair 2005-2008.**
11. Dec 2008 **Certificate of Merit**, in IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS'2008, Macao, China.
10. Jan 2008 **IEEE Fellow, “For leadership in engineering education”.**
9. Jun 2007 **Most Favourite Teacher**, elected by the students of DEEE / FST / UM.
8. Jul 2006 **Two Certificates of Merit**, in IEEE Regional Inter-University Post-graduate Electrical and Electronic Engineering Conference – RIUPEEEEC'2006, Macao, China.
7. Jul 2005 **Silver Leaf Certificate**, in Proc. IEEE Ph.D. Research in Microelectronics and Electronics Conference – PRIME'2005, Volume I, pp.223-226, École Polytechnique Fédéral de Lausanne - EPFL, Lausanne, Switzerland.
6. Jul 2005 **Certificate of Merit**, in IEEE Regional Inter-University Post-graduate Electrical and Electronic Engineering Conference – RIUPEEEEC'2005, Hong Kong, China.
5. Feb/Jun 2005 **Award for Second Place / Conceptual Architecture Category**, in IEEE 52nd Edition International Solid-State Circuits Conference - ISSCC'2005 (San Francisco) & 42nd Edition of Design Automation Conference – DAC'2005 (Anaheim), California, USA.

- 4. May 2005** **Certificate of Merit**, in *IEEE International Symposium on Circuits and Systems - ISCAS'2005*, Kobe, Japan.
- 3. Oct 2004** **Best Paper Award**, in *IEEE / IEE Japan 7th International Analog VLSI Workshop - AVLSIWS'2004*, Macao, China.
- 2. Jul 2004** **Best Paper Award - Second Place**, in *IEEE Midwest Symposium on Circuits and Systems - MWSCAS'2004*, Hiroshima, Japan.
- 1. Oct 2003** **Best Paper Award**, in *IEEE International Conference on ASIC - ASICON'2003*, Beijing, China.

Decorations

- Dec 19 **2001** **Honorary Title of Value**, Decoration attributed by the Macao Special Administrative Region Government (Chinese Administration), Macao, China.
- Dec 10 **1999** **Medal of Merit (Class of Professional Merit)**, Decoration attributed by the Macao Government (Portuguese Administration), Macao.

Professional Activity (*in the International Scientific Community*)

Professional Association (*Institute of Electrical & Electronics Engineers-IEEE*)

- Jan 1 **2020** Dec 31 **2020** **Vice-Chair, IEEE CASS Fellow Evaluation Committee**, Class 2021.
- Jan 1 **2018** Dec 31 **2018** **Member, IEEE CASS Fellow Evaluation Committee**, Class of 2019.
- Jan 1 **2017** Dec 31 **2017** **Chair, IEEE Circuits And Systems Society (CASS) Fellow Evaluation Committee**, Class 2018.
- Jan 1 **2016** Dec 31 **2016** **Member, Nominations Committee, IEEE CAS Society.**
- Jan 1 **2014** Dec 31 **2014** **Member, Nominating Committee, Division I (CASS, EDS, SSCS) – Director of IEEE, Representative of IEEE CASS.**
- Jan 1 **2012** Dec 31 **2013** **Vice-President (World), Regional Activities and Membership of the IEEE Circuits and Systems Society (CASS).**
- Jan 1 **2012** Dec 31 **2013** **Member, IEEE CASS Fellow Evaluation Committee, Classes of 2013 & 2014.**
- Jan 1 **2010** Dec 31 **2013** **Associate-Editor, IEEE Transactions on CAS-Part II: Express Briefs, of the IEEE Circuits and Systems Society (CASS) – Best Associate-Editor 2012-2013.**
- Jan 1 **2009** Dec 31 **2011** **Vice-President, Region 10 (Asia, Australia, the Pacific) of the IEEE Circuits and Systems Society (CASS).**
- Jan 1 **2008** **IEEE Fellow** [IEEE Member since 1988].
- Aug 1 2005 Dec 31 **2008** **Founding Chairman, IEEE Macau Joint-Chapter CAS/COM [“2009 World-Chapter of the Year” by IEEE CASS].**
- Nov 14 **2003** Dec 31 **2005** **Founding Chairman, IEEE Macau Section.**
- 1998** **Counselor, UM IEEE Student Branch.**

Scientific Reviewer

- Apr **2020** **External Reviewer**, in the evaluation of a research project proposal in the field of *Electronics* entitled *Hierarchical Analog IC Automatic Synthesis* [**Invited by Instituto das Telecomunicações – Instituto Superior Técnico, Universidade de Lisboa, Portugal**].

Jun	2017	External Reviewer , in the Review of the <i>School of Electronic, Information and Electrical Engineering, Shanghai Jiao Tong University</i> [Invited by the Shanghai Jiao Tong University, China].
Dec	2014	External Examiner , in the evaluation of a Ph.D. Thesis entitled <i>Multiband LTE Power Amplifier for Handset Application</i> [Invited by the University of Malaya].
Jan	2012	External Examiner , in the evaluation of a Ph.D. Thesis entitled <i>Low-Voltage Low-Power Analog-to-Digital Converters</i> [Invited by the National University of Singapore].
Mar	2010	External Examiner , in the evaluation of a research project proposal in the field of <i>Prognostics and System Health Management (PHM)</i> [Invited by the Research Grants & Contracts Office of the City University of Hong Kong].
Jul	2003	External Examiner , in the evaluation of a research project proposal in the field of <i>Microelectronics</i> submitted by Chinese University of Hong Kong [Invited by the Research Grants Council – RGC of the Hong Kong University Grants Committee – UGC].

Reviewer – Scientific Journals

IEEE Journal of Solid-State Circuits
IEEE Transactions on Circuits and Systems I: Regular Papers
IEEE Transactions on Circuits and Systems II: Express Briefs
IEEE Transactions on VLSI Systems
IET Electronics Letters
IET Circuits Devices & Systems
Journal for Optimization and Engineering (Springer)
Journal of Circuits, Systems & Computers (World Scientific-Japan)
Analogue Integrated Circuits & Signal Processing Journal (Springer)
International Journal of Circuit Theory and Applications (Wiley-Interscience)
IEEE Transactions on CAS I: Fundamental Theory and Applications (2000–2003)
IEEE Transactions on CAS II: Analog and Digital Signal Processing (2000–2003)
IEE Electronics Letters (1992–2006)

Reviewer – Conferences

IEEE European Solid-State Circuits Conference – ESSCIRC
IEEE International Symposium on Circuits and Systems – ISCAS
IEEE Asian Solid-State Circuits Conference – ASSCC
IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS
IEEE Phd Research In Microelectronics & Electronics ASIA – PRIMEASIA
IEEE Phd Research In Microelectronics & Electronics – PRIME
IEEE Design of Circuits and Integrated Systems – DCIS

Conferences Organization (48)

Nov	2019		48. IEEE Asian Solid-State Circuits Conference – ASSCC’2019 , Macao, China, General Chair	
May	2019		47. IEEE International Symposium on Circuits and Systems – ISCAS’2019 , Sapporo, Hokkaido, Japan, International Advisory Committee	
May 27	2018	May 30	2018	46. IEEE International Symposium on Circuits and Systems – ISCAS’2018 , Florence, Italy, Plenary Co-Chair
Jan 15	2017	Jan 18	2017	45. ACM & IEEE Asia South Pacific Design Automation Conference – ASP-DAC’2017 , Tokyo, Japan, International Steering Committee
Oct 25	2016	Oct 28	2016	44. 13th IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS’2016 , Jeju, South Korea, International Advisory Committee Co-Chair

Feb 1	2016	Feb 4	2016	43. ACM & IEEE Asia South Pacific Design Automation Conference – ASP-DAC'2016 , Macao, China, General Chair
Nov 27	2015	Nov 29	2015	42. 6 th IEEE Asia-Pacific Conference on Postgraduate Research in Microelectronics and Electronics – PRIMEASIA'2015 , Hyderabad, India, General Co-Chair
Jun	2011	Jul	2018	34-41. IEEE Ph.D. Research in Microelectronics and Electronics PRIME'2011-2018 , Technical Program Committee
Nov 17	2014	Nov 20	2014	33. 12 th IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS'2014 , Ishigaki, Okinawa, Jaipan, International Steering Committee Chair
Sep 17	2014	Sep 19	2014	32. XXIV Annual Meeting of the Association of Portuguese Speaking Universities – AULP'2014 , Macao, China, Scientific Program Committee Chair
Dec 19	2013	Dec 21	2013	31. 5 th IEEE Asia-Pacific Conference on Postgraduate Research in Microelectronics and Electronics – PRIMEASIA'2013 , Hyderabad, India, International Steering Committee Chair & General Co-Chair
Dec 5	2012	Dec 7	2012	30. 4 th IEEE Asia-Pacific Conference on Postgraduate Research in Microelectronics and Electronics – PRIMEASIA'2012 , Hyderabad, India, International Steering Committee Chair & General Co-Chair
Dec 2	2012	Dec 5	2012	29. 11 th IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS'2012 , Kaohsiung, Taiwan, International Steering Committee Chair
Oct 6	2011	Oct 8	2011	28. 3 rd IEEE Asia-Pacific Conference on Postgraduate Research in Microelectronics and Electronics – PRIMEASIA'2011 , Macao, China, General Chair
Jun 30	2011	Jul 1	2011	27. 10 th IEEE International Symposium on Signals, Circuits and Systems – ISSCS'2011 , Iasi, Romania, Technical Program Committee
Dec 6	2010	Dec 9	2010	26. 10 th IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS'2010 , Kuala Lumpur, Malaysia, International Steering Committee Chair
Sep 13	2010	Sep 17	2010	25. 36 th IEEE European Solid-State Circuits Conference – ESSCIRC'2010 , Seville, Spain, Technical Program Committee Member & Co-Chair of the Analog Circuits Sub-Committee
Sep 6	2010	Sep 10	2010	24. XX Annual Meeting of the Association of Portuguese Speaking Universities – AULP'2010 , Macao, China, Scientific Program Committee Chair
Jan 12	2010	Jan 14	2010	23. 2 nd IEEE International Conference on Frontiers of Prognostics & Health Management – PHM'2010 , Macao, China, (jointly organized by CALCE/University of Maryland, City University of Hong Kong and UM), Conference Co-Chair
Dec 7	2009	Dec 10	2009	22. 7 th IEEE International Conference on Information, Communications and Signal Processing – ICICS'2009 , Macao, China, (jointly organized by Nanyang Technological University, Singapore and UM), Honorary Conference Co-Chair
Nov 31	2008	Dec 3	2008	21. 9 th IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS'2008 , Macao, China, General Chair
May 27	2008	May 28	2008	20. Jean Monnet Conference – The European Union at 50: Assessing the Past, Looking Ahead , UM, Macao, China, (jointly supported by the European Union and UM), Organizing Committee
Dec 4	2006	Dec 6	2006	19. 8 th IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS'2006 , Singapore, Technical Program Committee
Aug 24	2006	Aug 27	2006	18. 10 th IEEE Cross-Strait Tri-Regional Radio, Science & Wireless Technology conference – CSTRWC'2006 , UM, Macao, China, (supported by IEEE Macau, H.K., Beijing & Taipei Sections), General Chair
Jul 13	2006	Jul 14	2006	17. 4 th IEEE / IEE Regional Inter-University Postgraduate Electrical and Electronics Engineering Conference – RIUPEEE'2006 , UM, Macao, China, (supported by IEEE Macau & H.K. Sections and IEE H.K.), General Chair

Jun 12	2006	Jun 16	2006	16. XVI Annual Meeting of the Association of Portuguese Speaking Universities – AULP'2006 , Macao, China, Scientific Program Committee Chair
Jun 12	2006	Jun 15	2006	15. IEEE Ph.D. Research in Microelectronics and Electronics – PRIME'2006 , Otranto, Lecce, Italy, Technical Program Committee
Dec 11	2005	Dec 13	2005	14. IEEE 2005 Asia-Pacific Workshop on Visual Information Processing – VIP'2005 , Hong Kong, China, Advisory Committee
Nov 30	2005	Dec 2	2005	13. 4th International Conference on Wavelet Analysis and its Applications – WAA'2005 , UM, Macao, China, (supported by IEEE Macau Section), Honorary Chair
Jul 14	2005	Jul 15	2005	12. IEEE / IEE Regional Inter-University Postgraduate Electrical and Electronics Engineering Conference – RIUPEEE'2005 , Hong Kong, China, (supported by IEEE H.K. & Macau Sections and IEE Hong Kong), Advisory Committee
Jun 29	2005	Jul 3	2005	11. IEEE International Conference on Robotics & Biomimetics – ROBIO'2005 , Hong Kong & Macao, China, (supported by IEEE H.K. & Macau Sections), Academic Advisory Board
Jun 14	2005	Jun 16	2005	10. 9th IEEE International Symposium on Consumer Electronics – ISCE'2005 , UM, Macao, China, (supported by IEEE H.K. & Macau Sections), Organizing Committee Chair – Macao
Apr 27	2005	Apr 30	2005	9. IEEE 2005 International Conference on Asian Green Electronics , Pudong, Shanghai, China, Academic Advisory Board
Dec 6	2004	Dec 9	2004	8. 7th IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS'2004 , Tainan, Taiwan, Technical Program Committee
Nov 30	2004	Dec 2	2004	7. 11th IEEE Annual Conference on Mechatronics and Machine Vision in Practice – M2VIP'2004 , UM, Macao, China, (supported by IEEE H.K. & Macau Sections), Organizing Committee Chair – Macao
Oct 13	2004	Oct 15	2004	6. IEEE / IEE Japan International Analog VLSI Workshop – AVLSIWS'2004 , UM, Macao, China, (supported by IEEE Tokyo CAS Chapter and IEEE Macau Section), General Chair http://www.umac.mo/AVLSIWS2004/
Sep 21	2004	Sep 23	2004	5. IEEE European Solid-State Circuits Conference – ESSCIRC'2004 , Leuven, Belgium, Technical Program Committee
Apr 27	2004	Apr 30	2004	4 IEEE 2004 International Conference on the Business of Electronic Product Reliability and Liability , Shanghai, China, Local Advisory Board
Oct 7	2003	Oct 10	2003	3. XIII Annual Meeting of the Association of Portuguese Speaking Universities – AULP'2003 , Macao, China, Scientific Program Committee Chair
Apr 20	1998	Apr 23	1998	2. VIII Annual Meeting of the Association of Portuguese Speaking Universities – AULP'1998 , Macao, China, Scientific Program Committee Chair
Jul 2	1997	Jul 4	1997	1. 1st International Conference on Technology Policy and Innovation / Management, Assessment, Commercialization, Application and Organization of Science and Technology – Macau'97 , UM, Macao, China, (jointly organized by UM, IST / TU of Lisbon and University of Texas at Austin), General Co-Chair

Invited Lectures / Presentations [14]

Feb 22	2017	13. & 14. <u>“Two Decades nurturing Scientists in Macao– From a Desert to a State Key Lab of China excelling in the World-Stage of Electronics”</u> , University Lecture Series , University of Macau, Macao, China (13) & DECE/IST/U of Lisbon, Portugal (14).
Mar 16	2016	

- May 30 **2015** **12.**"Two Decades of Microelectronics in Macao – From a Desert to a State Key Lab of China and Beyond", **Invited Lecture**, Chao Kuang Pio College, University of Macau, **Macao, China.**
- Oct 8 & 9 **2013** **11.**"Two Decades of Microelectronics in Macao – From a Desert to a State Key Lab of China in Analog and Mixed-Signal VLSI", **Invited Lecture**, (Oct. 8) - National Chiao Tung University, (Oct. 9) - Chip Implementation Center (CIC), **Hsinchu, Taiwan.**
- Feb 10 **2012** **10.**"Duas Décadas de Microelectrónica em Macau – De UM Deserto a um Laboratório de Referência do Estado Chinês", **Invited Lecture**, Portuguese Academy of Sciences, **Lisbon, Portugal.**
- May 18 & 20 **2011** **9.**"Two Decades in Macao Microelectronics – Education, Industry, Scientific Research / State Key Laboratory of Analog and Mixed-Signal VLSI – Locally, from World (Quality) to National (Quantity)", **Invited Seminar** (May 18), Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Minas Gerais, & **Invited Speaker** (May 20), IEEE CASS Workshop, Universidade Federal do Rio Grande do Sul (UFRGS), Porto Alegre, Rio Grande do Sul, **Brazil** [also as a Guest Editorial in *Macao ICT Magazine*, Vol. 7, pp. 6-7, May 2011].
- Mar 28 **2008** **8.**"Why the interest in the position of Vice-Rector (Research)?", to the UM Recruitment Committee of Vice-Rector (Research), **Macao, China.**
- Nov 25 **2005** **7.**"Portuguese Universities in transition from Tradition to European Union Bologna's Higher-Education Framework System – University of Macau as a Case Study", **Keynote Speaker** in 2005 Sino Education Conference, National Taiwan Normal University, **Taipei, Taiwan.**
- May 24 **2005** **6.**"Universidade de Macau – Tecnologia, Gestão Eficiente e Desenvolvimento Acelerado", **Keynote Speaker** in 15th Annual Meeting Association of Portuguese Speaking Universities - AULP, Instituto Superior de Ciências Sociais e Políticas - ISCSP/TU of **Lisbon, Portugal.**
- Feb 17 **2004** **5.**"EEE Activities in Macao", in the Ceremony of Installation as the Founding Chairman of IEEE Macau Section (witnessed by IEEE President), University of Macau, **Macao, China**, and in the Annual R10 Meeting, **Adelaide, Australia**, April **2004.**
- Nov **2003** **4.**"University of Macau – Teaching, Research and Management with International Standards", **Invited Speaker** in Presidents' Forum – the Reform and Development of Contemporary Higher Education, 110th Anniversary - University of Wuhan, **Hubei, China.**
- Oct 25 **2000** **3.**"Analog Filters in Integrated Systems: CMOS Multirate Switched-Capacitor and GaAs Microwave Lumped and Tuned Transversal", **Invited Speaker** in The First Portugal-China Workshop on Solid-State Circuits, jointly-organized by IST / TU of Lisbon, UM and University of Fudan, **Shanghai, China.**
- Nov **1998** **2.**"University Development facing Globalization – Teaching and R&D in the Age of Information Technology", **Invited Speaker** in Symposium on Educational Reform & Development for 21st Century Higher Education of Learning, 70th Anniversary – University of Guangxi, **Nanning, China.**
- Jul 27 **1993** **1.**"CMOS Multirate Switched-Capacitor Filters", **Invited Seminar** in the Institute of Microelectronics, University of Tsinghua, **Beijing, China.**

Pedagogic Activity (Teaching)

Jun	2007			Most Favorite Teacher , elected by the students of DEEE / FST / UM
				Courses [21]
Oct 16	1992	Jul	2014	Departament of Electrical and Computer Engineering (ECE) , Faculty of Science and Technology, University of Macau [10] Bachelor: <i>Information Technology Revolution and Electronics (New – From 2011/2012 to 2013/2014), Circuit Analysis (CA), Signals and Systems (S&S), (student evaluation – average: CA 2004/2005 – 5 e S&S 2007/2008 – 4.5 to 5, in a scale of 1 to 6), plus Telecommunication Electronics, Digital Signal Processing, System Design and Final Project (supervised 24 students between 92/93 and 99/00)</i> Master: <i>Microelectronic Circuit Design, Microelectronics for Telecommunications and Signal Processing, or Introduction to Research</i>
Oct 1	1980	Oct 15	1992	Electronics Section , DECE/IST/TU of Lisbon [11] Bachelor: <i>Applied Electronics III, Applied Electronics IV, Telecommunications and Electronics Laboratory, Electronics II (Telecommunications), Electronics III, Electronics IV, Microelectronics of Telecommunications and Final Project (supervised 2 students in 91/92)</i> Master: <i>Optimization and Modelation, Analog and Digital Filtering and Microelectronics of Telecommunications</i>

Scientific Activity (Research)

a) Funded Research Projects & State Key Lab

Oct 16	1992		Present	i) Department of ECE , Faculty of Science and Technology, University of Macau Scientific R&D Projects (22) [as Principal Investigator - PI]
Jan	2020	Dec	2022	22. Plan & Budget 2020-2022 / Advancing State-of-the-Art Electronics and Microsystems for Emerging Applications and Commercialization , funded by FDCT (36MMOP) - State Key Lab Fund – IV
Jan	2017	Dec	2019	21. Plan & Budget 2017-2019 / Maintaining World-level State-of-the-Art Electronics Status while Expanding Commercialization Activity , funded by FDCT (30MMOP) - State Key Lab Fund - III
Jun	2015	Jun	2018	20. Electronic-Automated Digital Microfluidics System for Disease Diagnostics , funded by FDCT and Research Committee of UM (4MMOP)
Jan	2015	Jan	2017	19. Giga-Hz ADC for Next Generation WiGig and WiHD Wireless Communication Systems , funded by FDCT and Research Committee of UM (2.75MMOP) [Co-PI]
Jun	2014	Jun	2017	18. High-Performance Wideband Data Conversion Interfaces for a Evolving Informative World , funded by FDCT and Research Committee of UM (5.5MMOP) [Co-PI]

Jan	2014	Dec	2016	17. Plan & Budget 2014-2016 / Consolidation and Further Integration of the Research Lines , funded by FDCT (60MMOP) and Match Fund from UM - Research (40MMOP) - <u>State Key Lab Fund - II</u>
Dec	2012	Dec	2015	16. Ultra-Low Power Solar-Powered CMOS Biomedical Implantable Sensing Chip capable of Bi-Directional Communication , funded by FDCT and Research Committee of UM (3MMOP) [Co-PI]
Dec	2011	Set	2015	15. Investigation on CMOS Based Digital Microfluidics , funded by FDCT (3MMOP) and Research Committee of UM (1MMOP), in collaboration with the <i>Dalian Institute of Chemical Physics of Chinese Academy of Sciences</i>
Jan	2011	Dec	2013	14. Plan & Budget 2011-2013 / Setup of Human and Technical Infrastructure of the Analog and Mixed-Signal VLSI State Key Laboratory , funded by FDCT (30MMOP) and Match Fund from UM - Research (10MMOP) - <u>State Key Lab Fund - I</u>
May	2010	Dec	2013	13. General Purpose Intelligent Adaptive Biosignal Acquisition System (Phase VI) , funded by FDCT and Research Committee UM (1MMOP) [Co-PI]
Dec	2009	May	2014	12. Integrated Generalized PWM Controller for DC-AC Inverter , funded by FDCT and Research Committee UM (1.5MMOP) [Co-PI]
Dec	2009	May	2013	11. Research and Development of Comprehensive Data Conversion Platforms in Nanometer CMOS Technology , funded by FDCT and Research Committee UM (5MMOP) [Co-PI]
Nov	2009	Jun	2013	10. Wireless Circuits and Systems for Mobile TV Applications in Nanoscale CMOS , funded by FDCT and Research Committee UM (5MMOP) [Co-PI]
Jan	2007	Dec	2008	9. Low-Voltage Multistandard-Compliant CMOS Wireless-Transceiver Analog-Baseband Platform , funded by FDCT and Research Committee UM (2MMOP)
Jan	2007	Dec	2008	8. High-Speed, High-Resolution, Low-Power Analog-to-Digital Conversion System with Emerging Scaled CMOS Technology , funded by FDCT and Research Committee UM (2.4MMOP)
Oct	2003	Aug	2007	7. Analog Baseband Microelectronics for SOC - Novel CMOS IF Data Conversion Platform for Multi-Standard Wireless Communication , funded by Research Committee UM (4.8MMOP - including the financial support to create the <i>Analog and Mixed-Signal VLSI Research Lab</i> initiated in 2004.
Jan	2005	Aug	2005	6. Two-Step Channel Selection for Wireless Receiver and Transmitter Front-Ends , application to US Patent, funded by FDCT (150KMOP)

Oct	2003	Jun	2006	5. RF Microelectronics For SoC – Analysis and Design of the Reusable RF Platform , funded by Research Committee UM (<u>4MMOP</u> – including updating of testing equipment from the <i>Wireless Communication Research Lab</i> concluded in 2005)
Oct	2000	Jun	2001	4. Research Laboratory establishment in Wireless Communication , funded by Research Committee UM (<u>2MMOP</u> – for the creation of the <i>Wireless Communication Research Lab</i> concluded in 2001)
Oct	1999	Jun	2001	3. Integrated Circuit Design of Low-Voltage Low-Power Multirate Analog-Digital System , funded by Research Committee UM (<u>200KMOP</u>)
Oct	1998	Jun	2000	2. MMIC Design and Testing , funded by Research Committee UM (<u>120KMOP</u>)
Nov	1993	Jun	1994	1. UMCHIP – University of Macau CHIP , funded by Research Committee UM (<u>40KMOP</u>)
Oct 1	1980	Oct 15	1992	ii) Department of Electrical and Computer Engineering , DECE/IST/TU of Lisbon R&D Projects (collaboration with companies - 4) [as Researcher]
	1990		1991	4. Integrated Circuit for Mobile Phone , for EID, Portugal
	1986		1987	3. Analog Filtering and Tone Detection for a V.32 Modem , for British Telecom, UK
	1985		1986	2. Modem of 1200 b.p.s. , for Standard Electrical, Portugal
	1982		1983	1. Modem of 300 b.p.s. , for Centrel/CAEP-ID, Portugal

b) Theses

Oct 16	1992		Present	Department of ECE , FST/UM Ph.D. Theses Supervised (26) [As Supervisor or Co-supervisor]
<u>Sep (18)</u>	2019			26.Liang Qi , Low-Power Cascaded Delta-Sigma Modulator for Wideband Telecommunication Applications (Supervisor)
Jan	2019			25.Jiang Yang , Design of Fully Integrated Fine-Grained Switched-Capacitor DC-DC Topologies in Bulk CMOS (Supervisor)
Apr	2018			24.Zhiyuan Chen , Efficient Power Management Design for Energy Harvesting Biomedical Applications (Supervisor)
Dec	2017			23.Gengzhen Qi , SAW-Less Multiband TDD/FDD Transceiver Front-Ends Using Gain-Boosted N-path Techniques (Co-Supervisor)
Sep	2017			22.Chak-Fong Cheang , <i>Digital Correction Techniques for I/Q Mismatch, LO Feedthrough and Distortion in Wideband Transmitters</i> (Co-Supervisor)

- Sep **2017** **21. Wei-Han Yu**, *Power-Efficient and Wideband WLAN Transmitter Techniques in Nanoscale CMOS* (Co-Supervisor)
- Sep **2016** **20. Ka-Meng Lei**, *Handheld CMOS-Based NMR Devices for Biological/Chemical Diagnosis* (Co-Supervisor)
- Mar **2016** **19. Chio-In Jeong**, *Low-Power CMOS Processors Design for ECG QRS Wave Detection and Data Compression* (Co-Supervisor)
- Oct **2015** **18. Jie Gao**, *Electronic-Automated Intelligent Digital Microfluidic System and Its Applications to DNA Amplification* (Supervisor)
- Mar **2015** **17. Yaohua Zhao**, *Low-Power High-Linearity and Area-Efficient Switched-Capacitor Filters Design Techniques in Nanoscale CMOS* (Supervisor)
- Mar **2015** **16. Tawfiq Amin**, *Analysis and Design of Power-Efficient Voltage-Controlled Oscillators for Wireless Applications in Nanoscale CMOS* (Supervisor)
- Jul **2014** **15. Yan Zushu**, *Systematic Design and Implementation of Single-Stage and Multi-Stage CMOS Amplifiers* (Supervisor)
- Jul **2014** **14. Zhicheng Lin**, *Ultra-Low-Power and Ultra-Low-Cost Short-Range Wireless Receivers in Nanoscale CMOS* (Supervisor)
- Jul **2014** **13. Fujian Lin**, *Advanced Circuit Design Techniques for Low-Power Wideband Wireless Receivers in Nanoscale CMOS* (Supervisor)
- Jul **2014** **12. Ka-Fai Un**, *New Architectures and Circuit Design Techniques for TV-Band White-Space Wireless Transmitters* (Supervisor)
- Mar **2012** **11. U-Fat Chio**, *Design Techniques for Low-Power High-Speed Analog-to-Digital Converters using Binary-Search and Subranging Schemes* (Co-Supervisor)
- Jul **2011** **10. Zhu Yan**, *Circuit Techniques for High-Performance SAR-Type ADCs* (Co-Supervisor)
- Jul **2011** **9. He-Gong Wei**, *Design of High-Speed Power/Area Optimized Multi-Bit/Cycle SAR ADC* (Co-Supervisor)
- Jul **2008** **8. Sai-Weng Sin**, *Generalized Low-Voltage Circuit Design Techniques for Very High-Speed Time-Interleaved Pipelined ADC* (Supervisor)
- Jul **2008** **7. Sio-Weng Ting**, *Multiple-Bandgap Defected Ground Structure and its Applications to Highly Selective Microwave Bandpass Filters* (Co-Supervisor)
- Jun **2008** **6. Wai-Wa Choi**, *Microwave Miniaturization Techniques and their Applications to Quasi-Elliptic Bandpass Filters* (Supervisor)
- Jul **2006** **5. Pui-In Mak**, *Multistandard-Compliant and Low-Voltage Analog-Baseband Techniques for Wireless Communication Systems* (Supervisor)

Jul	2002	4.Vai Mang I , <i>Detecting ECG Late Potentials using Wavelet Transform</i> (Co-Supervisor)
Jun	2002	3.Seng-Pan U , <i>Multirate Switched-Capacitor Interpolation Techniques for Very-High Frequency Analog Front-End Filtering</i> (Supervisor)
Apr	2001	2.Cheong Ngai , <i>Interactive Compiler for Automated Design of IIR SC Multistage Decimators</i> (Supervisor)
Jul	2000	1.Kam-Weng Tam , <i>MMIC Lumped and Transversal Active Bandpass Filter</i> (Co-Supervisor)
		M.Sc. Theses Supervised (21) [As Supervisor or Co-supervisor]
Dec	2014	21.Li Yue , <i>Joint-Digital-Predistortion for Wireless Transmitter's I/Q Imbalance and PA Nonlinearities using an Asymmetrical Complexity Reduced Volterra Series Model</i> (Co-Supervisor)
Jul	2014	20.Peng Xingqiang , <i>Advanced Circuit Techniques for Class-D Power Amplifiers in Nanoscale CMOS</i> (Co-Supervisor)
Jun	2014	19.Wang Wei , <i>Systematic Analysis and Design of Area-Efficient Frequency Compensation Techniques for Micropower Two-Stage CMOS Amplifiers</i> (Co-Supervisor)
Aug	2013	18.Chen Zhiyuan , <i>Single-Chip Solar Energy Harvesting IC with Integrated Solar Cells for Biomedical Application</i> (Supervisor)
Dec	2012	17.Weng-Fai Cheng , <i>A Wideband Balun Low-Noise Amplifier and Digital Impairment Correction Techniques for Wireless Transmitters</i> (Co-Supervisor)
Dec	2012	16.Yan-Jie Xiao , <i>Capacitance-to-Digital Converter for Lab-on-Chip Digital Microfluidics System & an Ultra-low Power SAR ADC with Effective Calibration</i> (Co-Supervisor)
Jul	2012	15.Wei-Han Yu , <i>Digital Pre-distortion and Calibration Techniques for Wireless Transmitters</i> (Co-Supervisor)
Jun	2011	14.Liu Miao , <i>High-Voltage-Enabled Operational Amplifier and Active-Decoupling Technique for Wideband Balun-LNA</i> (Co-Supervisor)
Apr	2010	13.Keng-Wai Lo , <i>Wideband Active-Balun Variable-Gain Low-Noise Amplifier for Mobile-TV Applications</i> (Co-Supervisor)
Jul	2009	12.Ka-Fai Un , <i>Nanoscale CMOS Circuits for Wireless Applications: CT/DT Channel Selection Filter & Open-Loop Multi-Phase Local-Oscillator Generators</i> (Supervisor)
Aug	2008	11.He-Gong Wei , <i>Design of High-Speed Analog-to-Digital Converter with High Accuracy Power Switchable Track-and-Hold</i> (Co-Supervisor)
Jul	2008	10.Yan Zhu , <i>Comprehensive Linearity Analysis of High-Speed Power-Efficient Successive-Approximation ADCs with Series Capacitive DAC Structure</i> (Co-Supervisor)

Aug	2007	9.Weng-Ieng Mok , <i>New Architecture for Pipeline/Two-Step ADC</i> (Co-Supervisor)
Aug	2007	8.Ka-Hou Ao Ieong , <i>Low-Voltage Analog Baseband Circuitry for IEEE 802.11a WLAN Transceiver</i> (Co-Supervisor)
Jul	2007	7.Kin-Sang Chio , <i>A Robust Low-Distortion Sigma-Delta Modulator for Dual-Mode RF Receivers</i> (Co-Supervisor)
Jul	2007	6.Ngai Kong , <i>Reconfigurable Switched-Current Fuzzy Logic Controller</i> (Co-Supervisor)
Jun	2006	5.Ma Jun Xia , <i>Design of Power Efficient Flash-Interpolation Type ADC for UWB Applications</i> (Co-Supervisor)
Sep	2003	4.Sai-Weng Sin , <i>Timing-Jitter Effects in Time-Interleaved Sampled-Data Systems – Generalized Noise Analysis & Mismatch-Insensitive Clock Generation</i> (Co-Supervisor)
Dec	2002	3.Lou Fan , <i>Mismatch-Insensitive N-Path Multirate SC Sigma-Delta Modulator for High-Frequency Applications</i> (Supervisor)
Mar	1999	2.Lou Weng Tim , <i>CMOS Programmable Pulse and Multiphase Clock Generator</i> (Supervisor)
Jul	1997	1.Seng-Pan U , <i>Impulse Sampled Switched-Capacitor Sampling Rate Converters</i> (Supervisor)

Graduated Ph.D. Students (current appointments) [26]

2019	Liang Qi , Assistant Professor in the <i>Shanghai Jiao Tong University</i> , Shanghai, China.
2019	Jiang Yang , Post-Doc in the <i>State Key Lab of Analog and Mixed-Signal VLSI</i> , UM, Macao.
2018	Zhiyuan Chen , Post-Doc in the <i>State Key Lab of Analog and Mixed-Signal VLSI</i> , UM, Macao.
2017	Gengzhen Qi , Post-Doc in the <i>State Key Lab of Analog and Mixed-Signal VLSI</i> , UM, Macao.
2017	Chak-Fong Cheang , <i>Senior Engineer @ Mediatek</i> , Taiwan.
2017	Wei-Han Yu , Macao Fellow in the <i>State Key Lab of Analog and Mixed-Signal VLSI</i> , UM, Macao [currently in Stanford University, USA].
2016	Ka-Meng Lei , Assistant Professor in the <i>State Key Lab of Analog and Mixed-Signal VLSI-IME</i> , UM, Macao [before <i>Macao Fellow</i> in Harvard University, USA].
2016	Chio-In Ieong , <i>Design Engineer @ Hisilicon (Huawei)</i> , Shenzhen, China.
2015	Jie Gao , <i>Senior Administrative Officer, Clean Room (Microfluidics Chips), Biomedical Research Line</i> in the <i>SKLAB-AMSVLSI</i> , DEEE/FST/UM.
2015	Tawfiq Amin , <i>Assistant Professor @ Military Institute of Science & Technology (MIST)</i> , Dhaka, Bangladesh.
2015	Yaohua Zhao , <i>Design Engineer @ Mediatek</i> , Singapore.
2014	Zushu Yan , <i>Senior Design Engineer @ Marvell</i> , San Clara, California [before @ <i>Qualcomm</i> , San Diego, California, USA].
2014	Zhicheng Lin , <i>Senior Design Engineer @ Marvell</i> , San Clara, California [before @ <i>Qualcomm</i> , San Diego, California, USA].

- 2014** **Fujian Lin**, *Design Engineer @ Mediatek, Singapore.*
- 2014** **Ka-Fai Un**, *Assistant Professor in the State Key Lab of Analog and Mixed-Signal VLSI -IME, UM, Macao [before Macao Fellow in University College Dublin, Ireland].*
- 2012** **U-Fat Chio**, *Associate Professor in Chongqin University, Chongqin, China.*
- 2011** **He-Gong Wei**, *Design Engineer @ Silicon Labs, LA, California, USA, former Post-Doc in the Communication Circuits Laboratory, Electrical Engineering Department, University of California Los Angeles (UCLA), USA.*
- 2011** **Yan Zhu**, *Associate Professor in the State Key Lab of Analog and Mixed-Signal VLSI & Part-time Consultant @ Hisilicon (Huawei), UM, Macao & Shenzhen, China.*
- 2008** **Wai-Wa Choi**, *Associate Professor, Wireless Communication Lab, DECE/FST/UM, Macao.*
- 2008** **Sio-Weng Ting**, *Assistant Professor, Wireless Communication Lab, DECE/FST/UM, Macao.*
- 2008** **Sai-Weng Sin**, *Associate Professor, Sub-Director IME, Academic Coordinator & Coordinator of the Data Conversion & Signal Processing Research Line in the State Key Lab of Analog and Mixed-Signal VLSI, DECE/FST/UM, Macao, Senior Member of IEEE, Macao.*
- 2006** **Pui-In Mak**, *Full Professor, Associate Director (Research), Sub-Director IME & Coordinator of the Wireless Research Line in the State Key Lab of Analog and Mixed-Signal VLSI, DECE/FST/UM, Fellow Member of IEEE, Fellow of IET, IEEE Distinguished Lecturer from IEEE CASS & SSCS, Macao.*
- 2002** **Vai Mang I**, *Associate Professor and former Head of Department of DECE/FST/UM. Former Chairman of IEEE Macau Section, Senior Member of IEEE, Macao.*
- 2002** **Seng-Pan U**, *General Manager Synopsys (Chipidea-Macao), Visiting Professor (part-time) in DECE/FST/UM, Deputy-Director of the State Key Lab of Analog and Mixed-Signal VLSI, Chairman of IEEE Macao Joint-Chapter on CAS/COM and of IEEE Macao SSC Chapter, IEEE Fellow, Macao.*
- 2001** **Cheong Ngai**, *Associate Professor in Macau Polytechnic Institute and Assistant Coordinator of the Computer Studies Program, Macao.*
- 2000** **Kam-Weng Tam**, *Full-Professor and Coordinator of the Wireless Communication Lab, Associate Dean of FST/UM and former Head of Department of DECE/FST/UM, Fellow of IET and Senior Member of IEEE, Macao.*

Service (Representing UM or Public in Macao)

- Jan 1 **2017** Aug **2020** **Chairman of the Special Committee about Technology Mediation and Cooperation Industry-University-Research of the Council of Science and Technology**, nominated by the Chief Executive of Macao SAR Government.

Aug 8	2016	Aug	2020	Member of the Council of Science and Technology , nominated by the Chief Executive of Macao SAR Government.
Jul 5	2016	Present		Member of the Consultative Committee , Jorge Álvares Foundation, Lisbon, Portugal.
Aug 19	2015	Present		President of the Council of Architecture, Engineering and Urbanism , nominated by the Chief Executive of Macao SAR Government.
Sep 19	2014	July 12	2017	President of the Association of Portuguese Speaking Universities - AULP , representing the Rector of UM.
Sep 1	2012	Jan 31	2018	Director of the European Union Academic Program – EUAP Macau , representing UM.
Jan 1	2011	Dec	2015	Coordinator of 21 courses in UM for the Secretariat of the Forum of Economic Cooperation between China, Macao and the Portuguese Speaking Countries .
Mar 1	2010	Present		Member of the Board (2010-2020) & President of the Fiscal Council (2020-2022) of the International Institute of Macao – IIM .
Jan 1	2009	Mar 31	2019	Chair of the Executive Committee – UMTEC (Technology Company owned by UM) , representing UM.
Sep 1	2007	Aug 31	2012	Executive Director of the <i>Jean Monnet Chair on European Union Law - Facing the Constitutional and Governance Challenges in the Era of Globalization</i> , in the Faculty of Law.
Sep 1	2005	Sep 19	2014	Vice-President of the Association of Portuguese Speaking Universities - AULP , representing the Rector of UM.
Sep 1	1997	Present		Scientific and Management Activity in IEEM Member of the Board of Directors of the Institute of European Studies of Macao – IEEM , between January and October of 2002, representing UM. President of the Scientific Council of the Master in European Studies (97/06). President of the General Assembly , representing UM (2008-Present).
Sep 1	1997	Dec 12	2018	President (or VP) of the General Assembly of the Institute for the Development and Quality – IDQ-Macau , representing UM.
Mar 1	1996	Dec 31	2012	Management Activity in INESC-Macau Member (96/97) and President of the Board of Directors (97/03), VP of the General Assembly , representing UM (2008-2012).
Sep 1	2001	Mar 31	2003	Member of the Council for Science and Technology , as President of INESC-Macau, nominated by Macao SAR Government (Chinese Administration).
Apr	2001	Sep	2002	Co-founder of Chipidea Microelectronics (Macao) [now Synopsys] representing UM in the elaboration of the Cooperation Protocol – UM / Chipidea Microelectronics that led to the creation of a Design Center of the company in Macao.
Oct 7	1998	Jan 31	2000	Member of the Consultative Council of the Y2K , as President of INESC-Macau, nominated by Macao SAR Government (Chinese Administration) [created the "Macao Y2K Center"].

Jan 1	1998	Dec 19	1999	Member of the Consultative Council for Science, Technology and Innovation , as President of INESC-Macau, nominated by Macao Government (Portuguese Administration).
Oct 1	1993	Aug 31	2000	Member of the Commission for the Recognition of Academic Degrees , nominated by Macao Government and working with GAES (Portuguese Administration).

Selected Publications & Patents (688)

Books (co-author)

7. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, *Handheld Total Chemical and Biological Analysis Systems: Bridging NMR, Digital Microfluidics, and Semiconductors*, ISBN 978-3-319-67825-2, Series of Analog Circuits and Signal Processing (ACSP), **Springer Press, USA**, January **2018**.
6. ZHICHENG LIN, PUI-IN MAK, R.P.MARTINS, *Ultra-Low-Power and Ultra-Low-Cost Short-Range Wireless Receivers in Nanoscale CMOS*, ISBN 978-3-319-21524-2, Series of Analog Circuits and Signal Processing (ACSP), **Springer Press, USA**, January **2016**.
5. PUI-IN MAK, R.P.MARTINS, *High-/Mixed-Voltage Analog and RF Circuit Techniques for Nanoscale CMOS*, ISBN 978-1-4419-9538-4, Series on Analog Circuits and Signal Processing, **Springer - USA**, March **2012**.
4. SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, *Generalized Low-Voltage Circuit Design Techniques for Very High-Speed Time-Interleaved Pipelined ADC*, Springer - Analog Circuits and Signal Processing, ISBN 978-90-481-9709-5, Dordrecht, The Netherlands: **Springer**, January **2011**.
3. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, *Analog Baseband Architectures and Circuits for Multistandard and Low-Voltage Wireless Transceivers*, The Kluwer International Series in Engineering and Computer Science - Analog Circuits and Signal Processing, ISBN: 978-1-4020-6432-6, Dordrecht, The Netherlands: **Springer**, September **2007**.
2. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, *Design of Very High-Frequency Multirate Switched-Capacitor Circuits – Extending the Boundaries of CMOS Analog Front-End Filtering*, Technology Series, ISBN: 978-7-03-018249-4, Beijing, China: **Science Press**, January **2007**.
1. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, *Design of Very High-Frequency Multirate Switched-Capacitor Circuits – Extending the Boundaries of CMOS Analog Front-End Filtering*, The Kluwer International Series in Engineering and Computer Science - Analog Circuits and Signal Processing, ISBN: 0-387-26121-4, Dordrecht, The Netherlands: **Springer**, September **2005**.

Book chapters

12. SHIHENG YANG, JUN YIN, PUI-IN MAK, R.P.MARTINS, "Multiplying DLLs", Chapter 24 in *Phase-Locked Frequency Generation and Clocking – Architectures and Circuits for Modern Wireless and Wireline Systems*, Editor: Woogeun Rhee, ISBN-13: 978-1785618857, pp.645-662, **The Institution of Engineering and Technology - IET: UK, 2020**.
11. KA-MENG LEI, NAN SUN, PUI-IN MAK, R.P.MARTINS, DONHEE HAM, "Micro-NMR on CMOS for biomolecular sensing", Chapter 5 in *CMOS Circuits for Biological Sensing and Processing*, Editors: Srinjoy Mitra & David R. S. Cumming, ISBN: 978-3-319-67722-4, pp.101-132, **Springer Press: USA, 2018**.
10. R.P.MARTINS, J. RANGEL, "O Impulso dos Encontros no Sul da China. O Ensino Superior de Macau, o apoio à AULP, e o Português na R.A.E.M.", *30 Anos a construir Redes de Ensino Superior em Português – Revista Internacional em Língua Portuguesa - RILP*, AULP Edition, III Série, No.30, ISSN: 2182-4452, pp.81-113, December **2016**.
9. R.P.MARTINS, "Multirate Filters" & "In Memoriam – Rui de Figueiredo", 2 Chapters in *A Brief History of Circuits and Systems – From Green, Mobile, Pervasive Networking to Big Data Computing*, Editors: Franco Maloberti & Anthony C. Davies, ISBN:978-8793379718, pp.101-104 & pp.305-306, **IEEE CAS Society & River Publishers: Denmark & The Netherlands, 2016**.
8. PUI-IN MAK, R.P.MARTINS, "Circuit Techniques for IoT-Enabling Short-Range ULP Radios", Chapter 14 in *Enabling the Internet of Things - From Integrated Circuits to Integrated Systems*, Editor: Massimo Alioto, ISBN: 978-3-319-51482-6, pp.385-408, **Springer Press: USA, 2016**.
7. R.P.MARTINS, "A Universidade de Macau – 35 Anos", in *40 Anos de Políticas de Ciência e de Ensino Superior*, Editors: Maria de Lurdes Rodrigues and Manuel Heitor (a tribute to José Mariano Gago), ISBN: 978-972-40-6121-4, pp.1043-1050, **Almedina, Coimbra, Portugal, July 2015**.
6. ZHICHENG LIN, PUI-IN MAK, R.P.MARTINS, "Design and Implementation of Ultra-Low-Power ZigBee WPAN Receiver", Chapter 15, Part III - Biomedical and Short-Range Radios, in *Wireless Transceiver Circuits: System Perspectives and Design Aspects*, Editors: W. Rhee & K. Iniewski, pp.403-424, ISBN: 978-1-4822-3435-0, **CRC Press: USA, 2015**.
5. KA-FAI UN, PUI-IN MAK, R.P.MARTINS, "An Open-Loop Multi-Phase Local-Oscillator Generation Technique", Chapter 10 in *Low Power Emerging Wireless Technologies*, pp. 297-312, ISBN: 978-1-4665-0701-2, Boca Raton, Florida, **CRC Press: USA, 2013**.

4. IU VAI PAN, R.P.MARTINS, "Science and Technology Policies for Macau towards the 21st Century", Part V Opportunities for China in *Science, Technology and Innovation Policy: Opportunities and Challenges for the Knowledge Economy*, pp.453-458, ISBN: 1-56720-271-3, Westport, **Quorum Books: USA, 2000.**
3. R.P.MARTINS, "A Universidade de Macau – Evolução recente e desafios futuros", in *A Presença Portuguesa no Pacífico – Fórum Macau*, ISBN: 972-9229-70-08, pp.119-137, **Instituto do Oriente/ISCSP: Technical University of Lisbon, Portugal, April/May 1999.**
2. A.C.M.SOUSA, R.P.MARTINS, "Visão Global do Desenvolvimento da Tecnologia nalguns Países da Região do Pacífico e um "Microcosmos": Macau", in *Elementos para a Gestão de Ciência e Tecnologia*, ISBN: 972-9493-36-7, pp.27-45, **JNICT: Portuguese Ministry of Science and Technology, Lisbon, Portugal 1996.**
1. J.E.FRANCA, R.P.MARTINS, "Multirate Switched-Capacitor Filters", Chapter 8 in *Design of VLSI for Telecommunications and Signal Processing*, pp.251-288, ISBN: 0-13-203639-8, Englewood Cliffs, New Jersey, **Prentice-Hall: USA, 1994.**

Patents – USA (32), Taiwan (3) & China (1)

USA

32. Ka Meng Lei, Pui In Mak, Man Kay Law, Rui P. Martins, "Palm-size μ NMR relaxometer using a digital microfluidic (DMF) device and a semiconductor transceiver for chemical/biological diagnosis", **US Patent, No. 10,436,726**, October 2019.
31. Yan Lu, Mo Huang, Seng Pan U, Rui P. Martins, "Reconfigurable bidirectional wireless charging transceiver", **US Patent, No. 10,256,661**, April 2019.
30. Tianlan Chen, Cheng Dong, Jie Gao, Yanwei Jia, Pui In Mak, Mang-I Vai, R. P. Martins, "Cooperative-electrode driving technique for droplet-velocity improvement of digital microfluidic systems", **US Patent, No. 10,016,759**, July 2018.
29. Mo Huang, Yan Lu, Sai-Wang Sin, Seng-Pan U, R. P. Martins, "Limit cycle oscillation reduction for digital low dropout regulators", **US Patent, No. 9,946,281**, April 2018.
28. Tianlan Chen, Cheng Dong, Jie Gao, Yanwei Jia, Pui In Mak, Mang-I Vai, R. P. Martins, "Electrode-voltage waveform for droplet-velocity and chip-lifetime improvements of digital microfluidic systems", **US Patent, No. 9,808,800**, November 2017.
27. Tianlan Chen, Cheng Dong, Jie Gao, Yanwei Jia, Pui In Mak, Mang-I Vai, R. P. Martins, "Electronic module for real-time droplet-position sensing and driving in digital microfluidic system", **US Patent, No. 9,751,083**, September 2017.
26. Pui In Mak, Lin Zhicheng, R. P. Martins, "Gain-boosted N-path passive-mixer-first receiver with a single mixing step", **US Patent, No. 9,680,448**, June 2017.
25. Pui In Mak, Lin Zhicheng, R. P. Martins, "Radio-Frequency-to-baseband function-reuse receiver with shared amplifiers for common-mode and differential-mode amplification", **US Patent, No. 9,673,781**, June 2017.
24. Man-Chung Wong, Chi-Seng Lam, Yan-Zheng Yang, Wai-Hei Choi, Ning-Yi Dai, Yajie Wu, Chi-Kong Wong, Sai-Weng Sin, U-Fat Chio, Seng-Pan U, R. P. Martins, "Mixed signal controller", **US Patent, No. 9,692,232**, June 2017.
23. Zhicheng Lin, Pui In Mak, R. P. Martins, "Complex-Pole Load Offering Concurrent Image Rejection and Channel Selection", **US Patent, No. 9,479,140**, October 2016.
22. Pui In Mak, Zhicheng Lin, R. P. Martins, "Ultra-Low-Voltage Current-Reuse Voltage-Controlled Oscillator and Transconductance-Capacitor Filter", **US Patent, No. 9,444,431**, September 2016.
21. Pui In Mak, Zhicheng Lin, R. P. Martins, "Gain-Boosted N-Path Bandpass Filter", **US Patent, No. 9,374,063**, June 2016.
20. Pui In Mak, Fujian Lin, R. P. Martins, "An RF-to-BB-Current-Reuse Wideband Receiver with Parallel N-Path Active/Passive Mixers", **US Patent, No. 9,356,636**, May 2016.
19. Zhicheng Lin, Pui In Mak, R. P. Martins, "IF-Noise-Shaping Transistorized Current-Mode Lowpass Filter Utilizing Cross-Coupled Transistors", **US Patent, No. 9,306,540**, April 2016.
18. Wei-Han Yu, Chak-Fong CHEANG, Ka-Fai UN, Pui In Mak, R. P. Martins, "Non-recursive Digital Calibration for Joint-elimination of Transmitter and Receiver I/Q Imbalances with Minimized Add-on Hardware", **US Patent, No. 9,276,798**, March 2016.
17. Pui In Mak, Fujian Lin, R. P. Martins, "RF-to-BB-Current-Reuse Wideband Receiver with a Single-MOS Pole-Zero LPF", **US Patent, No. 9,270,314**, February 2016.
16. Zhicheng Lin, Pui In Mak, R. P. Martins, "ZigBee Receiver Exploiting an RF-to-BB Current-Reuse Blixer and Hybrid Filter Topology", **US Patent, No. 9,237,055**, January 2016.
15. Ka-Fai Un, Pui-In Mak, R.P.Martins, "Wideband Driver Amplifier", **US Patent, No. 9,172,337**, October 2015.
14. Ka-Fai Un, Pui-In Mak, Man-Kay Law, R.P.Martins, "Poly-phase Local Oscillator", **US Patent, No. 9,093,951**, July 2015.
13. Ka-Fai Un, Pui-In Mak, Man-Kay Law, R.P.Martins, "Wireless Transmitter", **US Patent, No. 9,037,100**, May 2015.
12. Zushu Yan, Pui-In Mak, Man-Kay Law, R.P.Martins, "Frequency Compensation Techniques for Low-Power and Small-Area Multistage Amplifiers", **US Patent, No. 8,963,639**, February 2015.
11. Yan Zhu, Chi-Hang Chan, Sai-Weng Sin, Seng-Pan U, R.P.Martins, "Sampling front-end for analog to digital converter", **US Patent, No. 8,947,283**, February 2015.
10. Chi-Hang Chan, Yan Zhu, U-Fat Chio, Sai-Weng Sin, Seng-Pan U, R.P.Martins, "Comparator and Calibration Thereof", **US Patent, No. 8,829,942**, September 2014.

9. Yan Zhu, Chi-Hang Chan, Sai-Weng Sin, Seng-Pan U, *R.P.Martins*, Franco Maloberti, "Analog to Digital Converter Circuit", **US Patent, No. 8,659,461 B1**, February **2014**.
8. U-Fat Chio, He-Gong Wei, Yan Zhu, Sai-Weng Sin, Seng-Pan U, *R.P.Martins*, Franco Maloberti, "Cascade Analog to Digital Converting System", **US Patent, No. 8,466,823**, June **2013**.
7. He-Gong Wei, U-Fat Chio, Sai-Weng Sin, Seng-Pan U, *R.P.Martins*, "Delay Generator", **US Patent, No. 8,411,295**, May **2013**.
6. Sai-Weng Sin, Li Ding, Yan Zhu, He-Gong Wei, Chi-Hang Chan, U-Fat Chio, Seng-Pan U, *R.P.Martins*, Franco Maloberti, "Time-Interleaved Pipelined-SAR Analog-to-Digital Converter with Low Power Consumption", **US Patent, No. 8,427,355**, April **2013**.
5. Yan Zhu, Chi-Hang Chan, U-Fat Chio, Sai-Weng Sin, Seng-Pan U, *R.P.Martins*, Franco Maloberti, "N-Bits Successive Approximation Register Analog-to-Digital Converting System", **US Patent, No. 8,344,931**, January **2013**.
4. Pui-In Mak, Seng-Pan U, *R.P.Martins*, "Switched Current-Resistor Programmable Gain Array for Low-Voltage Wireless LAN System and Method Using the Same", **US Patent, No. 8,229,382**, July **2012**.
3. Pui-In Mak, Seng-Pan U, *R. P. Martins*, "Two-Step Channel Selection for Wireless Transmitter Front-Ends", **US Patent, No. 8,019,290**, September **2011**. [Cited in 5 US patents from Texas Instruments Inc., 2 x Qualcomm Inc., Applied Signal Technology, Inc., Raytheon Applied Signal Technology, Inc.]
2. Pui-In Mak, Seng-Pan U, *R. P. Martins*, "DC-Offset Canceled Programmable Gain Array for Low-Voltage Wireless LAN System and Method Using the Same", **US Patent, No. 7,948,309**, May **2011**. [Cited in 3 US patents: Intel Mobile Com., Realtek Semiconductor, Asahi Kasei Microdevices]
1. Pui-In Mak, Seng-Pan U, *R.P.Martins*, "Two-Step Channel-Selection for Wireless Receiver Front-Ends", **US Patent, No. 7,529,322**, May **2009**. [Cited in 6 US patents: Texas Instruments, 2 x Novatek Microelectronics, 2 x Qualcomm]

Taiwan

3. U-Fat Chio, He-Gong Wei, Yan Zhu, Sai-Weng Sin, Seng-Pan U, *R.P.Martins*, F.Maloberti, "Analog-to-Digital Converting System", **Taiwan Patent, No. I 479806**, April **2015**.
2. Sai-Weng Sin, Li Ding, Yan Zhu, He-Gong Wei, Chi-Hang Chan, U-Fat Chio, Seng-Pan U, *R.P.Martins*, F.Maloberti, "Analog to Digital Converter Circuit", **Taiwan Patent, No. I 446723**, July **2014**.
1. He-Gong Wei, U-Fat Chio, Sai-Weng Sin, Seng-Pan U, *R.P.Martins*, "Delay Generator", **Taiwan Patent, No. I 446719**, July **2014**.

China

1. T. L. Chen, C. Dong, J. Gao, Y. W. Jia, P. I. Mak, M. I. Vai, *R. Martins*, "一種檢測和分析 DNA 的方法" (A method for testing and analyzing DNA), **China Patent, No. CN107937485A, WO2019128081A1** (PCT), April 2018.

Papers in scientific journals - SCI (220)

[JSSC 48, TCAS-I 31, TCAS-II 25, El.Let. 17, TVLSI 16, TMTT 9]

220. ZHICONG HUANG, CHI-SENG LAM, PUI-IN MAK, *RUI P.MARTINS*, SIU-CHUNG WONG, CHI K. TSE, "A Single-Stage Inductive-Power-Transfer Converter for Constant-Power and Maximum-Efficiency Battery Charging", **IEEE Transactions on Power Electronics**, vol.35, No.9, pp.8973-8984, September **2020**.
219. MINGQIANG GUO, JIAJI MAO, SAI-WENG SIN, HEGONG WEI, *RUI P.MARTINS*, "A 5 GS/s 29 mW Interleaved SAR ADC With 48.5 dB SNDR Using Digital-Mixing Background Timing-Skew Calibration for Direct Sampling Applications", **IEEE Access**, vol.8, pp.138944-138954, August **2020**.
218. ZHIYUAN CHEN, MAN-KAY LAW, PUI-IN MAK, XIAOYANG ZENG, *RUI P.MARTINS*, "Piezoelectric Energy-Harvesting Interface Using Split-Phase Flipping-Capacitor Rectifier with Capacitor Reuse for Input Power Adaptation", **IEEE Journal of Solid-State Circuits**, vol.55, No.8, pp.2106-2117, August **2020**.
217. KAI XU, JUN YIN, PUI-IN MAK, ROBERT BOGDAN STASZEWSKI, *RUI P.MARTINS*, "A Single-Pin Antenna Interface RF Front End Using a Single-MOS DCO-PA and a Push-Pull LNA", **IEEE Journal of Solid-State Circuits**, vol.55, No.8, pp.2055-2068, August **2020**.
216. MO HUANG, YAN LU, *RUI P.MARTINS*, "An Analog-Proportional Digital-Integral Multiloop Digital LDO with PSR Improvement and LCO Reduction", **IEEE Journal of Solid-State Circuits**, vol.55, No.6, pp.1637-1650, June **2020**.
215. WEI WANG, CHI-HANG CHAN, YAN ZHU, *RUI P.MARTINS*, "A 100-MHz BW 72.6-dB-SNDR CT $\Delta\Sigma$ Modulator Utilizing Preliminary Sampling and Quantization", **IEEE Journal of Solid-State Circuits**, vol.55, No.6, pp.1588-1598, June **2020**.
214. NANDINI VITEE, HARIKRISHNAN RAMIAH, PUI-IN MAK, JUN YIN, *RUI P.MARTINS*, "A 1-V 4-mW Differential-Folded Mixer with Common-Gate Transconductor using Multiple Feedback achieving 18.4-dB Conversion Gain, +12.5-dBm IIP3, and 8.5-dB NF", **IEEE Transactions on VLSI Systems**, vol.28, No.5, pp.1164-1174, May **2020**.

213. XIN LU, MAN-KAY LAW, YANG JIANG, XIAOJIN ZHAO PUI-IN MAK, RUI P.MARTINS, "A 4- μ m Diameter SPAD using Less-Doped N-Well Guard Ring in Baseline 65-nm CMOS", *IEEE Transactions on Electron Devices*, vol.67, No.5, pp.2223-2225, May 2020.
212. REN SHEN, YANWEI JIA, PUI-IN MAK, RUI P.MARTINS, "Clip-to-release on amplification (CRoA): a novel DNA amplification enhancer on and off microfluidics", *Lab on a Chip, Royal Society of Chemistry*, vol.20, pp.1928-1938, March 2020.
211. NANDINI VITEE, HARIKRISHNAN RAMIAH, PUI-IN MAK, JUN YIN, RUI P.MARTINS, "A 3.15-mW +16.0-dBm IIP3 22-dB CG Inductively Source Degenerated Balun-LNA Mixer with Integrated Transformer-Based Gate Inductor and IM2 Injection Technique", *IEEE Transactions on VLSI Systems*, vol.28, No.3, pp.700-713, March 2020.
210. MINGQIANG GUO, JIAJI MAO, SAI-WENG SIN, HEGONG WEI, RUI P.MARTINS, "A 1.6-GS/s 12.2-mW Seven-/Eight-Way Split Time-Interleaved SAR ADC Achieving 54.2-dB SNDR With Digital Background Timing Mismatch Calibration", *IEEE Journal of Solid-State Circuits*, vol.55, No.3, pp.693-705, March 2020.
209. XIAOFEI LI, YAN LU, MO HUANG, RUI P.MARTINS, "A 2.4-GHz Mid-Field CMOS Wireless Power Receiver Achieving 46% Maximum PCE and 163-mW Output Power", *IEEE Transactions on CAS - Part II: Express Briefs*, vol.67, No.2, pp.360-364, February 2020.
208. LIANG QI, ANKESH JAIN, DONGYANG JIANG, SAI-WENG SIN, RUI P.MARTINS, MAURITS ORTMANN, "A 76.6-dB-SNDR 50-MHz-BW 29.2-mW Multi-Bit CT Sturdy MASH with DAC Non-Linearity Tolerance", *IEEE Journal of Solid-State Circuits*, vol.55, No.2, pp.344-355, February 2020.
207. WENNING JIANG, YAN ZHU, MINGLEI ZHANG, CHI-HANG CHAN, RUI PAULO MARTINS, "A Temperature-Stabilized Single-Channel 1-GS/s 60-dB SNDR SAR-Assisted Pipelined ADC with Dynamic Gm-R-Based Amplifier", *IEEE Journal of Solid-State Circuits*, vol.55, No.2, pp.322-332, February 2020.
206. YAN SONG, CHI-HANG CHAN, YAN ZHU, RUI P.MARTINS, "A 12.5-MHz Bandwidth 77-dB SNDR SAR-Assisted Noise Shaping Pipeline ADC", *IEEE Journal of Solid-State Circuits*, vol.55, No.2, pp.312-321, February 2020.
205. WEN-MING ZHENG, WEN-LIANG ZENG, CHI-WA U, CHI-SENG LAM, YAN LU, SAI-WENG SIN, MAN-CHUNG WONG, RUI PAULO MARTINS, "Analysis, Design and Control of an Integrated Three-Level Buck Converter under DCM Operation", *Journal of Circuits, Systems, and Computers - World Scientific*, vol.29, No.1, pp.2050011(1-20), February 2020.
204. HAOHONG YU, YONG CHEN, CHIRN CHYE BOON, PUI-IN MAK, RUI P.MARTINS, "A 0.096-mm² 1-20-GHz Triple-Path Noise-Canceling Common-Gate Common-Source LNA with Dual Complementary pMOS-nMOS Configuration", *IEEE Transactions on Microwave Theory and Techniques*, vol.68, No.1, pp.144-159, January 2020.
203. KA-MENG LEI, DONGWAN HA, YI-QIAO SONG, ROBERT M. WESTERVELT, RUI MARTINS, PUI-IN MAK, DONHEE HAM, "Portable NMR with Parallelism", *Analytical Chemistry, American Chemical Society Publications*, vol.92, No.2, pp.2112-2120, January 2020.
202. JIAO ZHAI, HAORAN LI, ADA HANG-HENG WONG, CHENG DONG, SHUHONG YI, YANWEI JIA, PUI-IN MAK, CHU-XIA DENG, RUI P.MARTINS, "A Digital Microfluidic System with 3D Microstructures for Single-Cell Culture", *Microsystems & Nanoengineering, Nature*, vol.6, Art.6, pp.1-10, January 2020.
201. KA-FAI UN, FEIFEI ZHANG, PUI-IN MAK, RUI P.MARTINS, ANDING ZHU, ROBERT BOGDAN STASZEWSKI, "Design Considerations of the Interpolative Digital Transmitter for Quantization Noise and Replicas Rejection", *IEEE Transactions on CAS - Part II: Express Briefs*, vol.67, No.1, pp.37-41, January 2020.
200. ZUNSONG YANG, YONG CHEN, SHIHENG YANG, PUI-IN MAK, RUI P.MARTINS, "A 10.6-mW 26.4-GHz Dual-Loop Type-II Phase-Locked Loop using Dynamic Frequency Detector and Phase Detector", *IEEE Access*, vol.8, pp.2222-2232, January 2020.
199. GABRIEL CHONG, HARIKRISHNAN RAMIAH, JUN YIN, JAGADHESWARAN RAJENDRAN, WEI RU WONG, PUI-IN MAK, RUI P.MARTINS, "CMOS Cross-Coupled Differential-Drive Rectifier in Subthreshold Operation for Ambient RF Energy Harvesting - Model and Analysis", *IEEE Transactions on CAS - Part II: Express Briefs*, vol.66, No.12, pp.1942-1946, December 2019.
198. CHAO FAN, WEI-HAN YU, PUI-IN MAK, RUI P.MARTINS, "A 40-Gb/s PAM-4 Transmitter using a 0.16-pJ/bit SST-CML-Hybrid (SCH) Output Driver and a Hybrid-Path 3-Tap FFE Scheme in 28-nm CMOS", *IEEE Transactions on CAS - Part I: Regular Papers*, vol.66, No.12, pp.4850-4861, December 2019.
197. MINGLEI ZHANG, CHI-HANG CHAN, YAN ZHU, RUI P.MARTINS, "A 0.6-V 13-bit 20-MS/s Two-Step TDC-Assisted SAR ADC with PVT Tracking and Speed-Enhanced Techniques", *IEEE Journal of Solid-State Circuits*, vol.54, No.12, pp.3396-3409, December 2019.
196. YANG JIANG, MAN-KAY LAW, ZHIYUAN CHEN, PUI-IN MAK, RUI P.MARTINS, "Algebraic Series-Parallel-Based Switched-Capacitor DC-DC Boost Converter with Wide Input Voltage Range and Enhanced Power Density", *IEEE Journal of Solid-State Circuits*, vol.54, No.11, pp.3118-3134, November 2019.
195. XINYI GE, YONG CHEN, XIAOTENG ZHAO, PUI-IN MAK, RUI P.MARTINS, "Analysis and Verification of Jitter in Bang-Bang Clock and Data Recovery Circuit with a Second-Order Loop Filter", *IEEE Transactions on VLSI Systems*, vol.27, No.10, pp.2223-2236, October 2019.
194. JIANGCHAO WU, KA-CHON LEI, HOU-MAN LEONG, YANG JIANG, MAN-KAY LAW, PUI-IN MAK, RUI P.MARTINS, "Fully Integrated High Voltage Pulse Driver using Switched-Capacitor Voltage Multiplier and Synchronous Charge Compensation in 65-nm CMOS", *IEEE Transactions on CAS - Part II: Express Briefs*, vol.66, No.10, pp.1768-1772, October 2019.

193. WEN-LIANG ZENG, ZI-YANG LIN, CHI-SENG LAM, MAN-KAY LAW, SAI-WENG SIN, FRANCO MALOBERTI, MAN-CHUNG WONG, *RUI PAULO MARTINS*, "Design of KY Converter with Constant On-Time Control Under DCM Operation", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.66, No.10, pp.1753-1757, October 2019.
192. XIAOCHAO LI, CHI-HANG CHAN, QI ZHANG, YAN ZHU, *R.P.MARTINS*, "Background Offset Calibration for Comparator Based on Temperature Drift Profile", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.66, No.10, pp.1648-1652, October 2019.
191. YONG CHEN, PUI-IN MAK, ZUNSONG YANG, CHIRN CHYE BOON, *RUI P.MARTINS*, "A 0.0071-mm² 10.8ps_{pp}-Jitter 4 to 10-Gb/s 5-Tap Current-Mode Transmitter using a Hybrid Delay Line for Sub-1-UI Fractional De-Emphasis", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.66, No.10, pp.3991-4004, October 2019.
190. U-FAT CHIO, KUO-CHIH WEN, SAI-WENG SIN, CHI-SENG LAM, YAN LU, FRANCO MALOBERTI, *RUI P.MARTINS*, "An Integrated DC-DC Converter with Segmented Frequency Modulation and Multiphase Co-Work Control for Fast Transient Recovery", *IEEE Journal of Solid-State Circuits*, vol.54, No.10, pp.2637-2648, October 2019.
189. JIANYANG DENG, CHI-SENG LAM, MAN-CHUNG WONG, SAI-WENG SIN, *RUI PAULO MARTINS*, "Instantaneous Power Quality Indices Detection under Frequency Deviated Environment", *IET Science, Measurement & Technology*, vol.13, No.8, pp.1111-1121, October 2019.
188. XUEWEI LEI, CHI-HANG CHAN, YAN ZHU, *RUI PAULO MARTINS*, "A 4-b 7- μ W Phase Domain ADC with Time Domain Reference Generation for Low-Power FSK/PSK Demodulation", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.66, No.9, pp.3365-3372, September 2019.
187. XIAOTENG ZHAO, YONG CHEN, PUI-IN MAK, *RUI P.MARTINS*, "A 0.0018-mm² 153% Locking-Range CML-Based Divider-by-2 with Tunable Self-Resonant Frequency using an Auxiliary Negative-g_m Cell", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.66, No.9, pp.3330-3339, September 2019.
186. KA-FAI UN, GENGZHEN QI, JUN YIN, SHIHENG YANG, SHUPENG YU, CHIO-IN IEONG, PUI-IN MAK, *RUI P.MARTINS*, "A 0.12-mm² 1.2-to-2.4-mW 1.3-to-2.65-GHz Fractional-N Bang-Bang Digital PLL with 8- μ s Settling Time for Multi-ISM-Band ULP Radios", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.66, No.9, pp.3307-3316, September 2019.
185. FANGYU MAO, YAN LU, *RUI P.MARTINS*, "A Reconfigurable Cross-Connected Wireless-Power Transceiver for Bidirectional Device-to-Device Wireless Charging", *IEEE Journal of Solid-State Circuits*, vol.54, No.9, pp.2579-2589, September 2019.
184. MO HUANG, YAN LU, *RUI P.MARTINS*, "A Reconfigurable Bidirectional Wireless Power Transceiver for Battery-to-Battery Wireless Charging", *IEEE Transactions on Power Electronics*, vol.34, No.8, pp.7745-7753, August 2019.
183. JIAO ZHAI, SHUHONG YI, YANWEI JIA, PUI-IN MAK, *RUI P.MARTINS*, "Cell-based Drug Screening on Microfluidics", *Trends in Analytical Chemistry, Elsevier*, vol.117, pp.231-241, August 2019.
182. YONG CHEN, ZUNSONG YANG, XIAOTENG ZHAO, YUNBO HUANG, PUI-IN MAK, *RUI P.MARTINS*, "A 6.5 X 7 μ m² 0.98-to-1.5 mW Nonself-Oscillation-Mode Frequency Divider-by-2 Achieving a Single-Band Untuned Locking Range of 166.6% (4-44 GHz)", *IEEE Solid-State Circuits Letters*, vol.2, No.5, pp.37-40, May 2019.
181. SHIHENG YANG, JUN YIN, HAIDONG YI, WEI-HAN YU, PUI-IN MAK, *RUI P.MARTINS*, "A 0.2-V Energy-Harvesting BLE Transmitter With a Micropower Manager Achieving 25% System Efficiency at 0-dBm Output and 5.2-nW Sleep Power in 28-nm CMOS", *IEEE Journal of Solid-State Circuits*, vol.54, No.5, pp.1351-1362, May 2019.
180. ZECHARIAH BALAN, HARIKRISHNAN RAMIAH, JAGADHESWARAN RAJENDRAN, NANDINI VITEE, PRAVINAH NAIR SHASIDHARAN, JUN YIN, PUI-IN MAK, *RUI P.MARTINS*, "A Coin-Battery-Powered LDO-Free 2.4-GHz Bluetooth Low Energy/Zigbee Receiver consuming 2 mA", *Integration, the VLSI Journal, Elsevier*, vol.66, pp.112-118, May 2019.
179. MINGZHONG LI, CHENG DONG, MAN-KAY LAW, YANWEI JIA, PUI-IN MAK, *RUI P.MARTINS*, "Hydrodynamic-flow-enhanced Rapid Mixer for Isothermal DNA Hybridization Kinetics Analysis on Digital Microfluidics Platform", *Sensors and Actuators B: Chemical, Elsevier*, vol.287, pp.390-397, May 2019.
178. BIAO WANG, SAI-WENG SIN, SENG-PAN U, FRANCO MALOBERTI, *RUI P.MARTINS*, "A 550- μ W 20-kHz BW 100.8-dB SNDR Linear-Exponential Multi-Bit Incremental $\Sigma\Delta$ ADC With 256 Clock Cycles in 65-nm CMOS", *IEEE Journal of Solid-State Circuits*, vol.54, No.4, pp.1161-1172, April 2019.
177. IAT-FAI SUN, JUN YIN, PUI-IN MAK, *RUI P.MARTINS*, "A Comparative Study of 8-Phase Feedforward-Coupling Ring VCOs", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.66, No.4, pp.527-531, April 2019.
176. ANTOINE DUPRÉ, KA-MENG LEI, PUI-IN MAK, *RUI P.MARTINS*, WENG KUNG PENG, "Micro- and Nanofabrication NMR Technologies for Point-of-Care Medical Applications – A Review", *Microelectronic Engineering, Elsevier*, vol.209, pp.66-74, March 2019.
175. CHEE CHEOW LIM, HARIKRISHNAN RAMIAH, JUN YIN, NARENDRA KUMAR, PUI-IN MAK, *RUI P.MARTINS*, "A 5.1-to-7.3 mW, 2.4-to-5 GHz Class-C Mode-Switching Single-Ended-Complementary VCO Achieving > 190 dBc/Hz FoM", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.66, No.2, pp.237-241, February 2019.
174. TONGQUAN JIANG, JUN YIN, PUI-IN MAK, *RUI P.MARTINS*, "A 0.5-V 0.4-to-1.6-GHz 8-Phase Bootstrap Ring-VCO Using Inherent Non-Overlapping Clocks Achieving a 162.2-dBc/Hz FoM", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.66, No.2, pp.157-161, February 2019.

173. JIANWEI LIU, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Accuracy-Enhanced Variance-Based Time-Skew Calibration using SAR as Window Detector", *IEEE Transactions on VLSI Systems: Transactions Briefs*, vol.27, No.2, pp.481-485, February 2019.
172. DEZHI XING, YAN ZHU, CHI-HANG CHAN, FRANCO MALOBERTI, SENG-PAN U, RUI PAULO MARTINS, "Design of a High-Speed Time-Interleaved Sub-Ranging SAR ADC with Optimal Code Transfer Technique", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.66, No.2, pp.489-501, February 2019.
171. LIANG WAN, JIE GAO, TIANLAN CHEN, CHENG DONG, HAORAN LI, YAN-ZI WEN, ZHAO-RONG LUN, YANWEI JIA, PUI-IN MAK, RUI P.MARTINS, "LampPort: a handheld digital microfluidic device for loop-mediated isothermal amplification (LAMP)", *Biomedical Microdevices, Springer Science + Business Media, LLC, part of Springer Nature* 2019, 21:9, published online: <https://doi.org/10.1007/s10544-018-0354-9>, (8 pages), 7 January 2019.
170. SHIHENG YANG, JUN YIN, PUI-IN MAK, RUI P.MARTINS, "A 0.0056-mm² -249-dB-FoM All-Digital MDLL using a Block-Sharing Offset-Free Frequency-Tracking Loop and Dual Multiplexed-Ring VCOs", *IEEE Journal of Solid-State Circuits*, vol.54, No.1, pp.88-98, January 2019.
169. RICARDO MARTINS, NUNO LOURENÇO, NUNO HORTA, JUN YIN, PUI-IN MAK, RUI P.MARTINS, "Many-Objective Sizing Optimization of a Class-C/D VCO for Ultralow-Power IoT and Ultralow-Phase-Noise Cellular Applications", *IEEE Transactions on VLSI Systems*, vol.27, No.1, pp.69-82, January 2019.
168. HAOHONG YU, YONG CHEN, CHIRN CHYE BOON, CHENYANG LI, PUI-IN MAK, RUI P.MARTINS, "A 0.044-mm² 0.5-to-7-GHz Resistor-Plus-Source-Follower-Feedback Noise-Cancelling LNA achieving a Flat NF of 3.3±0.45 dB", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.66, No.1, pp.71-75, January 2019.
167. CHENG LI, CHI-HANG CHAN, YAN ZHU, RUI P.MARTINS, "Analysis of Reference Error in High-Speed SAR ADCs with Capacitive DAC", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.66, No.1, pp.82-93, January 2019.
166. CHEE CHEOW LIM, HARIKRISHNAN RAMIAH, JUN YIN, PUI-IN MAK, RUI P.MARTINS, "An Inverse-Class-F CMOS Oscillator with Intrinsic-High-Q First Harmonic and Second Harmonic Resonances", *IEEE Journal of Solid-State Circuits*, vol.53, No.12, pp.3528-3539, December 2018.
165. YANG JIANG, MAN-KAY LAW, PUI-IN MAK, RUI P.MARTINS, "Algorithmic Voltage-Feed-In Topology for Fully Integrated Fine-Grained Rational Buck-Boost Switched-Capacitor DC-DC Converters", *IEEE Journal of Solid-State Circuits*, vol.53, No.12, pp.3455-3469, December 2018.
164. DAPENG SUN, TAN-TAN ZHANG, MAN-KAY LAW, PUI-IN MAK, RUI PAULO MARTINS, "Process compensated bipolar junction transistor-based CMOS temperature sensor with a ±1.5°C (3σ) batch-to-batch inaccuracy", *IET Electronics Letters*, vol.54, No.22, pp.1270-1272, 1 November 2018.
163. YATAO PENG, JUN YIN, PUI-IN MAK, RUI P.MARTINS, "Low-Phase-Noise Wideband Mode-Switching Quad-Core-Coupled mm-wave VCO using a Single-Center-Tapped Switched Inductor", *IEEE Journal of Solid-State Circuits*, vol.53, No.11, pp.3232-3242, November 2018.
162. GUAN CHENG WANG, YAN ZHU, CHI-HANG CHAN, SENG-PAN U, RUI P.MARTINS, "Gain Error Calibrations for Two-Step ADCs: Optimizations either in Accuracy or Chip Area", *IEEE Transactions on VLSI Systems*, vol.26, No.11, pp.2279-2289, November 2018.
161. YUANQING HUANG, YAN LU, FRANCO MALOBERTI, RUI P.MARTINS, "Nano-Ampere Low-Dropout Regulator Designs For IoT Devices", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.65, No.11, pp.4017-4026, November 2018.
160. WEN-LIANG ZENG, CHI-SENG LAM, SAI-WENG SIN, FRANCO MALOBERTI, MAN-CHUNG WONG, RUI PAULO MARTINS, "A 220-MHz Bondwire-Based Fully-Integrated KY Converter with Fast Transient Response under DCM Operation", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.65, No.11, pp.3984-3995, November 2018.
159. GUANCHENG WANG, CHENG LI, YAN ZHU, JIANYU ZHONG, YAN LU, CHI-HANG CHAN, RUI P.MARTINS, "Missing-Code-Occurrence Probability Calibration Technique for DAC Nonlinearity with Supply and Reference Circuit Analysis in a SAR ADC", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.65, No.11, pp.3707-3719, November 2018.
158. YAN ZHU, CHI-HANG CHAN, ZI-HAO ZHENG, CHENG LI, JIAN-YU ZHONG, RUI P.MARTINS, "A 0.19 mm² 10 b 2.3 GS/s 12-Way Time-Interleaved Pipelined-SAR ADC in 65-nm CMOS", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.65, No.11, pp.3606-3616, November 2018.
157. YU-JUN MAO, CHI-SENG LAM, SAI-WENG SIN, MAN-CHUNG WONG, RUI PAULO MARTINS, "Review and Selection Strategy for High-Accuracy Modeling of PWM Converters in DCM", *Hindawi Journal of Electrical and Computer Engineering*, vol.2018, Article ID 3901693, pp.1-16, October 2018.
156. ZIYANG LUO, YAN LU, RUI P. MARTINS, "0.45-V 5.4-nW switched-capacitor bandgap reference with intermittent operation and improved supply immunity", *IET Electronics Letters*, vol.54, No.20, pp.1154-1156, 4 October 2018.
155. WEI WANG, YAN ZHU, CHI-HANG CHAN, RUI PAULO MARTINS, "A 5.35-mW 10-MHz Single-Opamp Third-Order CT ΔΣ Modulator with CTC Amplifier and Adaptive Latch DAC Driver in 65-nm CMOS", *IEEE Journal of Solid-State Circuits*, vol.53, No.10, pp.2783-2794, October 2018.
154. YA-JIE WU, CHI-SENG LAM, MAN-CHUNG WONG, SAI-WENG SIN, RUI PAULO MARTINS, "A Reconfigurable and Extendable Digital Architecture for Mixed Signal Power Electronics Controller", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.65, No.10, pp.1480-1484, October 2018.

153. DA FENG, EDOARDO BONIZZONI, FRANCO MALOBERTI, SAI-WENG SIN, RUI PAULO MARTINS, "A 10-MHz Bandwidth Two-Path Third-Order $\Sigma\Delta$ Modulator with Cross-Coupling Branches", *IEEE Transactions on CAS – Part II: Express Briefs*, vol. 65, No.10, pp.1410-1414, October 2018.
152. JIAJI MAO, MINGQIANG GUO, SAI-WENG SIN, RUI PAULO MARTINS, "A 14-Bit Split-Pipeline ADC with Self-Adjusted Opamp-Sharing Duty-Cycle and Bias Current", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.65, No.10, pp.1380-1384, October 2018.
151. LINGSHAN KONG, YONG CHEN, CHIRN CHYE BOON, PUI-IN MAK, RUI P.MARTINS, "A Wideband Inductorless dB-Linear Automatic Gain Control Amplifier using a Single-Branch Negative Exponential Generator for Wireline Applications", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.65, No.10, pp.3196-3206, October 2018.
150. GABRIEL CHONG, HARIKRISHNAN RAMIAH, JUN YIN, JAGADHESWARAN RAJENDRAN, WONG WEI RU, PUI-IN MAK, RUI P.MARTINS, "Ambient RF Energy Harvesting System: A Review on Integrated Circuit Design", *Analog Integrated Circuits and Signal Processing, Springer Science + Business Media, LLC, part of Springer Nature 2018*, published online: <https://doi.org/10.1007/s10470-018-1320-4>, (17 pages), 3 September 2018.
149. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, RUI P.MARTINS, "A Regulation-Free Sub-0.5-V 16-/24-MHz Crystal Oscillator with 14.2-nJ Startup Energy and 31.8- μ W Steady-State Power", *IEEE Journal of Solid-State Circuits*, vol.53, No.9, pp.2624-2635, September 2018.
148. XINGQIANG PENG, JUN YIN, WEI-HAN YU, PUI-IN MAK, RUI P.MARTINS, "A Coin-Battery-Powered LDO-Free 2.4-GHz Bluetooth Low-Energy Transmitter with 34.7% Peak System Efficiency", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.65, No.9, pp.1174-1178, September 2018.
147. YONG CHEN, PUI-IN MAK, CHIRN CHYE BOON, RUI P.MARTINS, "A 36-Gb/s 1.3-mW/Gb/s Duobinary-Signal Transmitter Exploiting Power-Efficient Cross-Quadrature Clocking Multiplexers with Maximized Timing Margin", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.65, No.9, pp.3014-3026, September 2018.
146. CHAK-FONG CHEANG, PUI-IN MAK, RUI P.MARTINS, "A Hardware-Efficient Feedback Polynomial Topology for DPD Linearization of Power Amplifiers: Theory and FPGA Validation", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.65, No.9, pp.2889-2902, September 2018.
145. LEI ZHAO, YAN LU, RUI P.MARTINS, "A Digital LDO with Co-SA Logics and TSPC Dynamic Latches for Fast Transient Response", *IEEE Solid-State Circuits Letters*, vol.1, No.6, pp.154-157, June 2018.
144. HAIDONG YI, WEI-HAN YU, PUI-IN MAK, JUN YIN, RUI P.MARTINS, "A 0.18-V 382- μ W Bluetooth Low-Energy Receiver Front-End With 1.33-nW Sleep Power for Energy-Harvesting Applications in 28-nm CMOS", *IEEE Journal of Solid-State Circuits*, vol.53, No.6, pp.1618-1627, June 2018.
143. XIAOFENG YANG, YAN ZHU, CHI-HANG CHAN, SENG-PAN U, RUI P.MARTINS, "Analysis of Common-Mode Interference and Jitter of Clock Receiver Circuits With Improved Topology", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.65, No.6, pp.1819-1829, June 2018.
142. GENGZHEN QI, BAREND VAN LIEMPD, PUI-IN MAK, RUI P.MARTINS, JAN CRANINCKX, "A SAW-Less Tunable RF Front End for FDD and IBFD Combining an Electrical-Balance Duplexer and a Switched-LC N-Path LNA", *IEEE Journal of Solid-State Circuits*, vol.53, No.5, pp.1431-1442, May 2018.
141. HAO GUO, YONG CHEN, PUI-IN MAK, RUI P.MARTINS, "A 0.083-mm² 25.2-to-29.5 GHz Multi-LC-Tank Class-F₂₃₄ VCO with a 189.6-dBc/Hz FOM", *IEEE Solid-State Circuits Letters*, vol.1, No.4, pp.86-89, April 2018.
140. TAN-TAN ZHANG, MAN-KAY LAW, PUI-IN MAK, MANG-I VAI, RUI P.MARTINS, "Nano-Watt Class Energy-Efficient Capacitive Sensor Interface With On-Chip Temperature Drift Compensation", *IEEE Sensors Journal*, vol.18, No.7, pp.2870-2882, April 1, 2018.
139. WEI WEI QIN, SAI-WENG SIN, SENG-PAN U, RUI PAULO MARTINS, "Quick and Cost-Efficient A/D Converter Static Characterization using Low-Precision Testing Signal", *Microelectronics Journal - Elsevier*, vol.74, pp.86-93, April 2018.
138. CHI-HANG CHAN, YAN ZHU, WAI-HONG ZHANG, SENG-PAN U, RUI PAULO MARTINS, "A Two-Way Interleaved 7-b 2.4-GS/s 1-Then-2 b/Cycle SAR ADC with Background Offset Calibration", *IEEE Journal of Solid-State Circuits*, vol.53, No.3, pp.850-860, March 2018.
137. HAIDONG YI, JUN YIN, PUI-IN MAK, RUI P.MARTINS, "A 0.032-mm² 0.15-V Three-Stage Charge-Pump Scheme Using a Differential Bootstrapped Ring-VCO for Energy-Harvesting Applications", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.65, No.2, pp.146-150, February 2018.
136. YAN SONG, CHI-HANG CHAN, YAN ZHU, LI GENG, SENG-PAN U, RUI PAULO MARTINS, "Passive Noise Shaping in SAR ADC With Improved Efficiency", *IEEE Transactions on VLSI Systems: Transactions Briefs*, vol.26, No.2, pp.416-420, February 2018.
135. WEI-HAN YU, KA-FAI UN, PUI-IN MAK, RUI P.MARTINS, "A 0.7–2.5 GHz, 61% EIRP System Efficiency, Four-Element MIMO TX System Exploiting Integrated Power-Relaxed Power Amplifiers and an Analog Spatial De-Interleaver", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.65, No.1, pp.14-25, January 2018.
134. MO HUANG, YAN LU, SENG-PAN U, RUI P.MARTINS, "An Analog-Assisted Tri-Loop Digital Low-Dropout Regulator", *IEEE Journal of Solid-State Circuits*, vol.53, No.1, pp.20-34, January 2018.
133. YONG CHEN, PUI-IN MAK, HAOHONG YU, CHIRN CHYE BOON, RUI P.MARTINS, "An Area-Efficient and Tunable Bandwidth-Extension Technique for a Wideband CMOS Amplifier Handling 50+ Gb/s Signaling", *IEEE Transactions on Microwave Theory and Techniques*, vol.65, No.12, pp.4960-4975, December 2017.

132. ZHIYUAN CHEN, MAN-KAY LAW, PUI-IN MAK, WING-HUNG KI, *RUI P.MARTINS*, "Fully Integrated Inductor-Less Flipping-Capacitor Rectifier for Piezoelectric Energy Harvesting", *IEEE Journal of Solid-State Circuits*, vol.52, No.12, pp.3168-3180, December 2017.
131. LIANG WAN, TIANLAN CHEN, JIE GAO, CHENG DONG, ADA HANG-HENG WONG, YANWEI JIA, PUI-IN MAK, CHU-XIA DENG, *RUI P.MARTINS*, "A digital microfluidic system for loop-mediated isothermal amplification and sequence specific pathogen detection", *Scientific Reports, NATURE*, 7:14586, DOI: 10.1038/s41598-017-14698-x (11 pages), 6 November 2017.
130. WEI-HAN YU, XINGQIANG PENG, PUI-IN MAK, *RUI P.MARTINS*, "A High-Voltage-Enabled Class-D Polar PA Using Interactive AM-AM Modulation, Dynamic Matching, and Power-Gating for Average PAE Enhancement", *IEEE Transactions on CAS - Part I: Regular Papers*, vol.64, No.11, pp.2844-2857, November 2017.
129. LIANG QI, SAI-WENG SIN, SENG-PAN U, FRANCO MALOBERTI, *RUI PAULO MARTINS*, "A 4.2-mW 77.1-dB SNDR 5-MHz BW DT 2-1 MASH $\Delta\Sigma$ Modulator With Multirate Opamp Sharing", *IEEE Transactions on CAS - Part I: Regular Papers*, vol.64, No.10, pp.2641-2654, October 2017.
128. CHI-HANG CHAN, YAN ZHU, CHENG LI, WAI-HONG ZHANG, IOK-MENG HO, LAI WEI, SENG-PAN U, *RUI PAULO MARTINS*, "60-dB SNDR 100-MS/s SAR ADCs With Threshold Reconfigurable Reference Error Calibration", *IEEE Journal of Solid-State Circuits*, vol.52, No.10, pp.2576-2588, October 2017.
127. YONG CHEN, PUI-IN MAK, CHIRN CHYE BOON, *RUI P.MARTINS*, "A 27-Gb/s Time-Interleaved Duobinary Transmitter Achieving 1.44-mW/Gb/s FOM in 65-nm CMOS", *IEEE Microwave and Wireless Components Letters*, vol.27, No.9, pp.839-841, September 2017.
126. ADA HANG-HENG WONG, HAORAN LI, YANWEI JIA, PUI-IN MAK, *RUI PAULO DA SILVA MARTINS*, YAN LIU, CHI MAN VONG, HANG CHEONG WONG, PAK KIN WONG, HAITAO WANG, HENG SUN, CHU-XIA DENG, "Drug screening of cancer cell lines and human primary tumors using droplet microfluidics", *Scientific Reports, NATURE*, 7:9109, DOI: 10.1038/s41598-017-08831-z (15 pages), 22 August 2017.
125. CHI-HANG CHAN, YAN ZHU, SAI-WENG SIN, U. SENG-PAN (BEN), *RUI P.MARTINS*, FRANCO MALOBERTI, "A 7.8-mW 5-b 5-GS/s Dual-Edges-Triggered Time-Based Flash ADC", *IEEE Transactions on CAS - Part I: Regular Papers*, vol.64, No.8, pp.1966-1976, August 2017.
124. GENGZHEN QI, PUI-IN MAK, *RUI P.MARTINS*, "A 0.038-mm² SAW-Less Multiband Transceiver Using an N-Path SC Gain Loop", *IEEE Journal of Solid-State Circuits*, vol.52, No.8, pp.2055-2070, August 2017.
123. JIANYU ZHONG, YAN ZHU, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, *RUI PAULO MARTINS*, "A 12b 180MS/s 0.068mm² With Full-Calibration-Integrated Pipelined-SAR ADC", *IEEE Transactions on CAS - Part I: Regular Papers*, vol.64, No.7, pp.1684-1695, July 2017.
122. XINGQIANG PENG, JUN YIN, PUI-IN MAK, WEI-HAN YU, *RUI P.MARTINS*, "A 2.4-GHz ZigBee Transmitter Using a Function-Reuse Class-F DCO-PA and an ADPLL Achieving 22.6% (14.5%) System Efficiency at 6-dBm (0-dBm) P_{out} ", *IEEE Journal of Solid-State Circuits*, vol.52, No.6, pp.1495-1508, June 2017.
121. CHEE CHEOW LIM, HARIKRISHNAN RAMIAH, JUN YIN, PUI-IN MAK, *RUI P.MARTINS*, "LC-VCOs using spiral inductors with single- and dual-layer patterned floating shields: a comparative study", *Analog Integrated Circuits and Signal Processing, Springer Science + Business Media New York 2017*, vol.91, No.3, pp.497-502, June 2017.
120. ZIYANG LUO, YAN LU, MO HUANG, JUNMIN JIANG, SAI-WENG SIN, SENG-PAN U, *RUI P.MARTINS*, "A sub-1V 78-nA bandgap reference with curvature compensation", *Microelectronics Journal - Elsevier*, vol.63, pp.35-40, May 2017.
119. GIM HENG TAN, HARIKRISHNAN RAMIAH, PUI-IN MAK, *RUI P.MARTINS*, "A 0.35-V 520- μ W 2.4-GHz Current-Bleeding Mixer with Inductive-Gate and Forward-Body Bias, Achieving >13-dB Conversion Gain and >55-dB Port-to-Port Isolation", *IEEE Transactions on Microwave Theory and Techniques*, vol.65, No.4, pp.1284-1293, April 2017.
118. AMIN KHALILI MOGHADDAM, JOON HUANG CHUAH, HARIKRISHNAN RAMIAH, JALIL AHMADIAN, PUI-IN MAK, *RUI P.MARTINS*, "A 73.9%-Efficiency CMOS Rectifier Using a Lower DC Feeding (LDCF) Self-Body-Biasing Technique for Far-Field RF Energy-Harvesting Systems", *IEEE Transactions on CAS - Part I: Regular Papers*, vol.64, No.4, pp.992-1002, April 2017.
117. CHIO-IN IEONG, MINGZHONG LI, MAN-KAY LAW, PUI-IN MAK, MANG I VAI, *RUI P.MARTINS*, "A 0.45 V 147-375 nW ECG Compression Processor With Wavelet Shrinkage and Adaptive Temporal Decimation Architectures", *IEEE Transactions on VLSI Systems*, vol.25, No.4, pp.1307-1319, April 2017.
116. DONGYANG JIANG, SAI-WENG SIN, SENG-PAN U, *RUI PAULO MARTINS*, FRANCO MALOBERTI, "Reconfigurable Mismatch-Free Time-Interleaved Bandpass Sigma-Delta Modulator for Wireless Communications", *IET Electronics Letters*, vol.53, No.7, pp.506-508, 30 March 2017.
115. DEZHI XING, YAN ZHU, CHI-HANG CHAN, SAI-WENG SIN, FAN YE, JUNYAN REN, SENG-PAN U, *RUI PAULO MARTINS*, "Seven-bit 700-MS/s Four-Way Time-Interleaved SAR ADC With Partial V_{cm} -Based Switching", *IEEE Transactions on VLSI Systems*, vol.25, No.3, pp.1168-1172, March 2017.
114. CHENG DONG, YANWEI JIA, JIE GAO, TIANLAN CHEN, PUI-IN MAK, MANG-I VAI, *RUI P.MARTINS*, "A 3D Microblade Structure for Precise and Parallel Droplet Splitting on Digital Microfluidic Chips", *Lab on a Chip, Royal Society of Chemistry*, vol.17, No.5, pp.896-904, March 2017.
113. YI-WEI TAN, CHI-SENG LAM, SAI-WENG SIN, MAN-CHUNG WONG, SENG-PAN U, *RUI PAULO MARTINS*, "DCM Operation Analysis of 3-Level Boost Converters", *IET Electronics Letters*, vol.53, No.4, pp.270-272, 16 February 2017.

112. ZHIYUAN CHEN, MAN-KAY LAW, PUI-IN MAK, RUI P.MARTINS, "A Single-Chip Solar Energy Harvesting IC Using Integrated Photodiodes for Biomedical Implant Applications", *IEEE Transactions on Biomedical Circuits and Systems*, vol.11, No.1, pp.44-53, February 2017.
111. YAN LU, HAOJUAN DAI, MO HUANG, MAN-KAY LAW, SAI-WENG SIN, SENG-PAN U, RUI P.MARTINS, "A Wide Input Range Dual-Path CMOS Rectifier for RF Energy Harvesting", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.64, No.2, pp.166-170, February 2017.
110. CHI-HANG CHAN, YAN ZHU, SAI-WENG SIN, BORIS MURMANN, SENG-PAN U, R.P.MARTINS, "Metastability in SAR ADCs", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.64, No.2, pp.111-115, February 2017.
109. YAN LU, MO HUANG, LIN CHENG, WING-HUNG KI, SENG-PAN U, RUI P.MARTINS, "A Dual-Output Wireless Power Transfer System With Active Rectifier and Three-Level Operation", *IEEE Transactions on Power Electronics*, vol.32, No.2, pp.927-930, February 2017.
108. KA-MENG LEI, HADI HEIDARI, PUI-IN MAK, MAN-KAY LAW, FRANCO MALOBERTI, RUI P.MARTINS, "A Handheld High-Sensitivity Micro-NMR CMOS Platform With B-Field Stabilization for Multi-Type Biological/Chemical Assays", *IEEE Journal of Solid-State Circuits*, vol.52, No.1, pp.284-297, January 2017.
107. ARSHAD HUSSAIN, SAI-WENG SIN, CHI-HANG CHAN, SENG-PAN (BEN) U, FRANCO MALOBERTI, RUI P.MARTINS, "Active-Passive $\Delta\Sigma$ Modulator for High-Resolution and Low-Power Applications", *IEEE Transactions on VLSI Systems*, vol.25, No.1, pp.364-374, January 2017.
106. YAN ZHU, CHI-HANG CHAN, SENG PAN U, RUI PAULO MARTINS, "A 10-bit 500-MS/s Partial-Interleaving Pipelined SAR ADC With Offset and Reference Mismatch Calibrations", *IEEE Transactions on VLSI Systems*, vol.25, No.1, pp.354-363, January 2017.
105. JUN YIN, PUI-IN MAK, FRANCO MALOBERTI, RUI P.MARTINS, "A Time-Interleaved Ring-VCO with Reduced $1/f^3$ Phase Noise Corner, Extended Tuning Range and Inherent Divided Output", *IEEE Journal of Solid-State Circuits*, vol.51, No.12, pp.2979-2991, December 2016.
104. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, RUI P.MARTINS, "A μ NMR CMOS Transceiver Using a Butterfly-Coil Input for Integration With a Digital Microfluidic Device Inside a Portable Magnet", *IEEE Journal of Solid-State Circuits*, vol.51, No.10, pp.2274-2286, October 2016.
103. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, RUI P.MARTINS, "CMOS biosensors for *in vitro* diagnosis-transducing mechanisms and applications", *Lab on a Chip, Royal Society of Chemistry*, vol.16, No.19, pp.3664-3681, October 2016.
102. MO HUANG, YAN LU, SAI-WENG SIN, SENG-PAN U, RUI P.MARTINS, WING-HUNG KI, "Limit Cycle Oscillation Reduction for Digital Low Dropout Regulators", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.63, No.9, pp.903-907, September 2016.
101. JIANWEI LIU, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, RUI PAULO MARTINS, "A 4x Time-Domain Interpolation 6-bit 3.4 GS/s 12.6 mW Flash ADC in 65 nm CMOS", *IEIE Journal of Semiconductor Technology and Science (South-Korea)*, vol.16, No.4, pp.395-404, August 2016.
100. YAN LU, CHENG LI, YAN ZHU, MO HUANG, SENG-PAN U, RUI P.MARTINS, "A 312 ps response-time LDO with enhanced super source follower in 28 nm CMOS", *IET Electronics Letters*, vol.52, No.16, pp.1368-1370, 4 August 2016.
99. MO HUANG, YAN LU, SAI-WENG SIN, SENG-PAN U, RUI P.MARTINS, "A Fully Integrated Digital LDO with Coarse-Fine-Tuning and Burst-Mode Operation", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.63, No.7, pp.683-687, July 2016.
98. JIANWEI LIU, YAN ZHU, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, RUI PAULO DA SILVA MARTINS, "Uniform Quantization Theory-Based Linearity Calibration for Split Capacitive DAC in an SAR ADC", *IEEE Transactions on VLSI Systems*, vol.24, No.7, pp.2603-2607, July 2016.
97. YAN ZHU, CHI-HANG CHAN, SENG-PAN U, RUI PAULO MARTINS, "An 11b 450 MS/s Three-Way Time-Interleaved Subranging Pipelined-SAR ADC in 65 nm CMOS", *IEEE Journal of Solid-State Circuits*, vol.51, No.5, pp.1223-1234, May 2016.
96. JIANGCHAO WU, MAN-KAY LAW, PUI-IN MAK, RUI P.MARTINS, "A 2- μ W 45-nV/ $\sqrt{\text{Hz}}$ Readout Front End With Multiple-Chopping Active-High-Pass Ripple Reduction Loop and Pseudofeedback DC Servo Loop", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.63, No.4, pp.351-355, April 2016.
95. MAN-KAY LAW, SANFENG LU, TAO WU, AMINE BERMAK, PUI-IN MAK, RUI P.MARTINS, "A 1.1 μ W CMOS Smart Temperature Sensor With an Inaccuracy of ± 0.2 $^{\circ}\text{C}$ (3σ) for Clinical Temperature Monitoring", *IEEE Sensors Journal*, vol.16, No.8, pp.2272-2281, April 15, 2016.
94. YUE LI, CHAK-FONG CHEANG, PUI-IN MAK, RUI P.MARTINS, "Joint-Digital-Predistortion for Wireless Transmitter's I/Q Imbalance and PA Nonlinearities Using an Asymmetrical Complexity-Reduced Volterra Series Model", *Analog Integrated Circuits and Signal Processing, Springer Science + Business Media New York* 2016, vol.87, No.1, pp.35-47, April 2016.
93. YAN ZHU, CHI-HANG CHAN, SI-SENG WONG, U SENG-PAN, RUI PAULO MARTINS, "Histogram-Based Ratio Mismatch Calibration for Bridge-DAC in 12-bit 120 MS/s SAR ADC", *IEEE Transactions on VLSI Systems*, vol.24, No.3, pp.1203-1207, March 2016.
92. CHI-HANG CHAN, YAN ZHU, SAI-WENG SIN, SENG-PAN (BEN) U, RUI PAULO MARTINS, "A 6 b 5 GS/s 4 Interleaved 3 b/Cycle SAR ADC", *IEEE Journal of Solid-State Circuits*, vol.51, No.2, pp.365-377, February 2016.
91. TIANLAN CHEN, YANWEI JIA, CHENG DONG, JIE GAO, PUI-IN MAK, RUI P.MARTINS, "Sub-7-second genotyping of single-nucleotide polymorphism by high-resolution melting curve analysis on a thermal digital microfluidic device", *Lab on a Chip, Royal Society of Chemistry*, vol.16, No.4, pp.743-752, February 2016.

90. U.R.JAGADHESWARAN, HARIKRISHNAN RAMIAH, PUI-IN MAK, *RUI P.MARTINS*, "A 2- μ m InGaP/GaAs Class-J Power Amplifier for Multi-Band LTE Achieving 35.8-dB Gain, 40.5% to 55.8% PAE and 28-dBm Linear Output Power", *IEEE Transactions on Microwave Theory and Techniques*, vol.64, No.1, pp.200-209, January 2016.
89. SUYAN FAN, MAN-KAY LAW, MINGZHONG LI, ZHIYUAN CHEN, CHIO-IN IEONG, PUI-IN MAK, *RUI P.MARTINS*, "Wide Input Range Supply Voltage Tolerant Capacitive Sensor Readout Using On-Chip Solar Cell", *Journal of Circuits, Systems, and Computers – World Scientific*, vol.25, No.1, pp.1640006(1-21), January 2016.
88. YUE LI, CHAK-FONG CHEANG, PUI-IN MAK, *RUI P.MARTINS*, "The dispersal analysis on basis construction of digital predistortion techniques for power amplifiers", *Analog Integrated Circuits and Signal Processing, Springer Science + Business Media New York* 2015, vol.86, No.1, pp.77-86, January 2016.
87. DA FENG, FRANCO MALOBERTI, SAI-WENG SIN, *RUI PAULO MARTINS*, "Polyphase Decomposition for Tunable Band-Pass Sigma-Delta A/D Converters", *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, vol.5, No.4, pp.537-547, December 2015.
86. MING-ZHONG LI, CHIO-IN IEONG, MAN-KAY LAW, PUI-IN MAK, MANG-I VAI, SIO-HANG PUN, *RUI P.MARTINS*, "Energy Optimized Subthreshold VLSI Logic Family With Unbalanced Pull-Up/Down Network and Inverse Narrow-Width Techniques", *IEEE Transactions on VLSI Systems*, vol.23, No.12, pp.3119-3123, December 2015.
85. YAOHUA ZHAO, PUI-IN MAK, MAN-KAY LAW, *RUI P.MARTINS*, "Improving the Linearity and Power Efficiency of Active Switched-Capacitor Filters in a Compact Die Area", *IEEE Transactions on VLSI Systems*, vol.23, No.12, pp.3104-3108, December 2015.
84. WEN-LIANG ZENG, CHI-SENG LAM, WEN-MING ZHENG, SAI-WENG SIN, NING-YI DAI, MAN-CHUNG WONG, SENG-PAN U, *RUI PAULO MARTINS*, "DCM operation analysis of KY converter", *IET Electronics Letters*, vol.51, No.24, pp.2037-2039, 19 November 2015.
83. KA-FAI UN, WEI-HAN YU, CHAK-FONG CHEANG, GENGZHEN QI, PUI-IN MAK, *RUI P.MARTINS*, "A Sub-GHz Wireless Transmitter Utilizing a Multi-Class-Linearized PA and Time-Domain Wideband-Auto I/O-LOFT Calibration for IEEE 802.11af WLAN", *IEEE Transactions on Microwave Theory and Techniques*, vol.63, No.10, pp.3228-3241, October 2015.
82. ZUSHU YAN, PUI-IN MAK, MAN-KAY LAW, *RUI P.MARTINS*, FRANCO MALOBERTI, "Nested-Current-Mirror Rail-to-Rail-Output Single-Stage Amplifier With Enhancements of DC Gain, GBW and Slew Rate", *IEEE Journal of Solid-State Circuits*, vol.50, No.10, pp.2353-2366, October 2015.
81. MAN-CHUNG WONG, YAN-ZHENG YANG, CHI-SENG LAM, WAI-HEI CHOI, NING-YI DAI, YAJIE WU, CHI-KONG WONG, SAI-WENG SIN, U-FAT CHIO, SENG-PAN U, *RUI P.MARTINS*, "Self-Reconfiguration Property of a Mixed Signal Controller for Improving Power Quality Compensation During Light Loading", *IEEE Transactions on Power Electronics*, vol.30, No.10, pp.5938-5951, October 2015.
80. JIANYU ZHONG, YAN ZHU, SAI-WENG SIN, SENG-PAN U, *RUI PAULO MARTINS*, "Thermal and Reference Noise Analysis of Time-Interleaving SAR and Partial-Interleaving Pipelined-SAR ADCs", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.62, No.9, pp.2196-2206, September 2015.
79. YAOHUA ZHAO, PUI-IN MAK, *RUI P.MARTINS*, FRANCO MALOBERTI/P.V. ANANDA MOHAN, YAOHUA ZHAO, PUI-IN MAK, *RUI P.MARTINS*, FRANCO MALOBERTI, "A 0.02 mm² 59.2 dB SFDR 4th-Order SC LPF with 0.5-to-10 MHz Bandwidth Scalability Exploiting a Recycling SC-Buffer Bigquad/Corrections", *IEEE Journal of Solid-State Circuits*, vol.50, No.9/No.10, pp.1988-2001/2464, September/October 2015.
78. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, *RUI P.MARTINS*, "A Palm-size μ NMR Relaxometer using a Digital Microfluidic Device and a Semiconductor Transceiver for Chemical/Biological Diagnosis", *Analyst, Royal Society of Chemistry*, vol.140, No.15, pp.5129-5137, August 2015.
77. LIANG QI, SAI-WENG SIN, SENG-PAN U, *RUI PAULO MARTINS*, "Resolution-enhanced Sturdy MASH Delta-Sigma Modulator for Wideband Low-Voltage Applications", *IET Electronics Letters*, vol.51, No.14, pp.1061-1063, 9 July 2015.
76. MD. TAWFIQ AMIN, JUN YIN, PUI-IN MAK, *RUI P.MARTINS*, "A 0.07 mm² 2.2 mW 10 GHz Current-Reuse Class-B/C Hybrid VCO achieving 196-dBc/Hz FoM_A", *IEEE Microwave and Wireless Components Letters*, vol.25, No.7, pp.457-459, July 2015.
75. JIE GAO, TIANLAN CHEN, CHENG DONG, YANWEI JIA, PUI-IN MAK, MANG-I VAI, *RUI P.MARTINS*, "Adhesion Promoter for a Multi-Dielectric-Layer on a Digital Microfluidic Chip", *RSC Advances, Royal Society of Chemistry*, vol.5, No.60, pp.48626-48630, May 2015.
74. CHAK-FONG CHEANG, KA-FAI UN, WEI-HAN YU, PUI-IN MAK, *RUI P.MARTINS*, "A Combinatorial Impairment-Compensation Digital Predistorter for a Sub-GHz IEEE 802.11af-WLAN CMOS Transmitter Covering a 10x-Wide RF Bandwidth", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.62, No.4, pp.1025-1032, April 2015.
73. CHENG DONG, TIANLAN CHEN, JIE GAO, YANWEI JIA, PUI-IN MAK, MANG-I VAI, *RUI P.MARTINS*, "On the droplet velocity and electrode lifetime of digital microfluidics: voltage actuation techniques and comparison", *Microfluidics and Nanofluidics (MANO), Springer-Verlag Berlin Heidelberg* 2014, vol.18, No.4, pp.673-683, DOI:10.1007/s10404-014-1467-y, April 2015.
72. ZUSHU YAN, WEI WANG, PUI-IN MAK, MAN-KAY LAW, *RUI P.MARTINS*, "A 0.0045-mm² 32.4- μ W Two-Stage Amplifier for pF-to-nF Load using CM Frequency Compensation", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.62, No.3, pp.246-250, March 2015.
71. ZUSHU YAN, PUI-IN MAK, MAN-KAY LAW, *RUI PAULO MARTINS*, "0.0045 mm² 15.8 μ W Three-Stage Amplifier driving 10x-wide (0.15-1.5 nF) Capacitive Loads with >50° Phase Margin", *IET Electronics Letters*, vol.51, No.6, pp.454-456, 19 March 2015.

70. FUJIAN LIN, PUI-IN MAK, RUI P.MARTINS, "Wideband Receivers: Design Challenges, Tradeoffs and State-of-the-Art", **IEEE CAS Magazine**, vol.15, No.1, pp.12-24, 1st Quarter 2015.
69. TAWFIQ AMIN, PUI-IN MAK, RUI P.MARTINS, "A 3.6-mW 6-GHz current-reuse VCO-buffer with improved load drivability in 65-nm CMOS", **International Journal of Circuit Theory and Applications**, Wiley Online Library, vol.43, No.1, pp.133-138, January 2015.
68. ZHICHENG LIN, PUI-IN MAK, RUI P.MARTINS, "A Sub-GHz Multi-ISM-Band ZigBee Receiver Using Function-Reuse and Gain-Boosted N-Path Techniques for IoT Applications", **IEEE Journal of Solid-State Circuits**, vol.49, No.12, pp.2990-3004, December 2014.
67. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, RUI P.MARTINS, "NMR-DMF: a modular nuclear magnetic resonance-digital microfluidics system for biological assays", **Analyst, Royal Society of Chemistry**, vol.139, No. 23, pp.6204-6213, December 2014.
66. FUJIAN LIN, PUI-IN MAK, RUI P.MARTINS, "An RF-to-BB-Current-Reuse Wideband Receiver with Parallel N-Path Active/Passive Mixers and a Single-MOS Pole-Zero LPF", **IEEE Journal of Solid-State Circuits**, vol.49, No.11, pp.2547-2559, November 2014.
65. MD. TAWFIQ AMIN, PUI-IN MAK, RUI P.MARTINS, "A 0.137 mm² 9 GHz Hybrid Class-B/C QVCO with Output Buffering in 65 nm CMOS", **IEEE Microwave and Wireless Components Letters**, vol.24, No.10, pp.716-718, October 2014.
64. HUGO HORTA, RUI MARTINS, "The start-up, evolution and impact of a research group in a university developing its knowledge base", **Tertiary Education and Management, Routledge Taylor & Francis Group**, vol.20, No.4, pp.280-293, published online: <http://dx.doi.org/10.1080/13583883.2014.948907>, 15 September 2014.
63. ZHICHENG LIN, PUI-IN MAK, RUI P.MARTINS, "Analysis and Modeling of a Gain-Boosted N-Path Switched-Capacitor Bandpass Filter", **IEEE Transactions on CAS – Part I: Regular Papers**, vol.61, No.9, pp.2560-2568, September 2014.
62. ZHICHENG LIN, PUI-IN MAK, RUI P.MARTINS, "A 0.14-mm² 1.4-mW 59.4-dB-SFDR 2.4-GHz ZigBee / WPAN Receiver Exploiting a "Split-LNTA + 50% LO" Topology in 65-nm CMOS", **IEEE Transactions on Microwave Theory and Techniques**, vol.62, No.7, pp.1525-1534, July 2014.
61. ZHICHENG LIN, PUI-IN MAK, RUI P.MARTINS, "A 2.4 GHz ZigBee Receiver Exploiting an RF-to-BB-Current-Reuse Blixer + Hybrid Filter Topology in 65 nm CMOS", **IEEE Journal of Solid-State Circuits**, vol.49, No.6, pp.1333-1344, June 2014.
60. PUI-IN MAK, MIAO LIU, YAOHUA ZHAO, RUI P.MARTINS, "Enhancing the performances of recycling folded cascode OpAmp in nanoscale CMOS through voltage supply doubling and design for reliability", **International Journal of Circuit Theory and Applications**, Wiley Online Library, vol.42, No.6, pp.605-619, June 2014.
59. TIANLAN CHEN, CHENG DONG, JIE GAO, YANWEI JIA, PUI-IN MAK, MANG-I VAI, RUI P.MARTINS, "Natural discharge after pulse and cooperative electrodes to enhance droplet velocity in digital microfluidics", **AIP Advances**, vol.4, No.4, pp.047129(1)-(8), April 2014.
58. FUJIAN LIN, PUI-IN MAK, RUI P.MARTINS, "A Sine-LO Square-Law Harmonic-Rejection Mixer – Theory, Implementation, and Application", **IEEE Transactions on Microwave Theory and Techniques**, vol.62, No.2, pp.313-322, February 2014.
57. YAN ZHU, CHI-HANG CHAN, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, RUI PAULO MARTINS, FRANCO MALOBERTI, "Split-SAR ADCs: Improved Linearity with Power and Speed Optimization", **IEEE Transactions on VLSI Systems**, vol.22, No.2, pp.372-383, February 2014.
56. YANWEI JIA, PUI-IN MAK, CONNER MASSEY, RUI P.MARTINS, LAWRENCE J. WANGH, "Construction of a microfluidic chip, using dried-down reagents, for LATE-PCR amplification and detection of single-stranded DNA", **Lab on a Chip, Royal Society of Chemistry**, vol.13, No.23, pp.4635-4641, December 2013.
55. KA-MENG LEI, PUI-IN MAK, RUI P.MARTINS, "Systematic Analysis and Cancellation of Kickback Noise in a Dynamic Latched Comparator", **Analog Integrated Circuits and Signal Processing, Springer Science + Business Media New York** 2013, vol.77, No.2, pp.277-284, November 2013.
54. TAN-TAN ZHANG, PUI-IN MAK, MANG-I VAI, PENG-UN MAK, MAN-KAY LAW, SIO-HANG PUN, FENG WAN, RUI P.MARTINS, "15-nW Biopotential LPFs in 0.35- μ m CMOS Using Subthreshold-Source-Follower Biquads With and Without Gain Compensation", **IEEE Transactions on Biomedical Circuits and Systems**, vol.7, No.5, pp.690-702, October 2013.
53. CHI-HANG CHAN, YAN ZHU, SAI-WENG SIN, SENG-PAN U, RUI PAULO MARTINS, FRANCO MALOBERTI, "A 5-bit 1.25-GS/s 4x-Capacitive-Folding Flash ADC in 65-nm CMOS", **IEEE Journal of Solid-State Circuits**, vol.48, No.9, pp.2154-2169, September 2013.
52. KA-FAI UN, PUI-IN MAK, RUI P.MARTINS, "A 53-to-75-mW, 59.3-dB HRR, TV-Band White-Space Transmitter Using a Low-Frequency Reference LO in 65-nm CMOS", **IEEE Journal of Solid-State Circuits**, vol.48, No.9, pp.2078-2089, September 2013.
51. WEI-HAN YU, CHAK-FONG CHEANG, PUI-IN MAK, WENG-FAI CHENG, KA-FAI UN, U-WAI LOK, RUI P.MARTINS, "A Nonrecursive Digital Calibration Technique for Joint Elimination of Transmitter and Receiver I/Q Imbalances With Minimized Add-On Hardware", **IEEE Transactions on CAS – Part II: Express Briefs**, vol.60, No.8, pp.462-466, August 2013.
50. SI-SENG WONG, U-FAT CHIO, YAN ZHU, SAI-WENG SIN, SENG-PAN U, RUI PAULO MARTINS, "A 2.3 mW 10-bit 170 MS/s Two-Step Binary-Search Assisted Time-Interleaved SAR ADC", **IEEE Journal of Solid-State Circuits**, vol.48, No.8, pp.1783-1794, August 2013. ["Among the top 3 most downloaded papers from the JSSC in IEEE Xplore in July 2013"]
49. CHEN-YAN CAI, YANG JIANG, SAI-WENG SIN, SENG-PAN U, RUI P.MARTINS, "Excess-loop-delay compensation technique for CT $\Delta\Sigma$ modulator with hybrid active-passive loop-filters", **Analog Integrated Circuits and Signal Processing, Springer**, vol.76, No.1, pp.35-46, July 2013.

48. ZUSHU YAN, PUI-IN MAK, MAN-KAY LAW, RUI P.MARTINS, "A 0.016-mm² 144- μ W Three-Stage Amplifier Capable of Driving 1-to-15 nF Capacitive Load with >0.95-MHz GBW", *IEEE Journal of Solid-State Circuits*, vol.48, No.2, pp.527-540, February 2013.
47. JIE GAO, XIANMING LIU, TIANLAN CHEN, PUI-IN MAK, YUGUANG DU, MANG-I VAI, BINGCHENG LIN, RUI P.MARTINS, "An intelligent digital microfluidic system with fuzzy-enhanced feedback for multi-droplet manipulation", *Lab on a Chip, Royal Society of Chemistry*, vol.13, No.3, pp.443-451, February 2013.
46. CHIO-IN IEONG, PUI-IN MAK, CHI-PANG LAM, CHENG DONG, MANG-I VAI, PENG-UN MAK, SIO-HANG PUN, FENG WAN, RUI P.MARTINS, "A 0.83- μ W QRS Detection Processor Using Quadratic Spline Wavelet Transform for Wireless ECG Acquisition in 0.35- μ m CMOS", *IEEE Transactions on Biomedical Circuits and Systems*, vol.6, No.6, pp.586-595, December 2012.
45. WEI-HAN YU, WENG-FAI CHENG, YUE LI, CHAK-FONG CHEANG, PUI-IN MAK, R.P.MARTINS, "Low-Complexity, Full-Resolution, Mirror-Switching Digital Predistortion Scheme for Polar-Modulated Power Amplifiers", *IET Electronics Letters*, vol.48, No.24, pp.1551-1553, 22 November 2012.
44. HEGONG WEI, CHI-HANG CHAN, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, RUI PAULO MARTINS, FRANCO MALOBERTI, "An 8-b 400-MS/s 2-b-Per-cycle SAR ADC with Resistive DAC", *IEEE Journal of Solid-State Circuits*, vol.47, No.11, pp.2763-2772, November 2012.
43. YAN ZHU, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, RUI PAULO MARTINS, FRANCO MALOBERTI, "A 50-fJ 10-b 160-MS/s Pipelined-SAR ADC Decoupled Flip-Around MDAC and Self-Embedded Offset Cancellation", *IEEE Journal of Solid-State Circuits*, vol.47, No.11, pp.2614-2626, November 2012.
42. PUI-IN MAK, RUI P.MARTINS, "Enhanced RFICs in Nanoscale CMOS", *IEEE Microwave Magazine*, vol.13, No.6, pp.80-89, September/October 2012.
41. PUI-IN MAK, CHON-TENG MA, R.P.MARTINS, "A Frequency-Translation Technique for Low-Noise Ultra-Low-Cutoff Lowpass Filtering", *Analog Integrated Circuits and Signal Processing, Springer Science + Business Media, LLC 2012*, vol.72, No.1, pp.265-269, July 2012.
40. ZUSHU YAN, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, "Ultra-area-efficient three-stage amplifier using current buffer Miller compensation and parallel compensation", *IET Electronics Letters*, vol.48, No.11, pp.624-626, 24 May 2012.
39. ZUSHU YAN, PUI-IN MAK, R.P.MARTINS, "Double recycling technique for folded-cascode OTA", *Analog Integrated Circuits and Signal Processing, Springer Science + Business Media, LLC 2011*, vol.71, No.1, pp.137-141, April 2012.
38. PUI-IN MAK, RUI P.MARTINS, "A 0.46-mm² 4-dB NF Unified Receiver Front-End for Full-Band Mobile TV in 65-nm CMOS", *IEEE Journal of Solid-State Circuits*, vol.46, No.9, pp.1970-1984, September 2011.
37. ZUSHU YAN, PUI-IN MAK, RUI P.MARTINS, "Two-Stage Operational Amplifiers: Power-and-Area-Efficient Frequency Compensation for Driving a Wide Range of Capacitive Load", *IEEE CAS Magazine*, vol.11, No.1, pp.26-42, 1st Quarter 2011.
36. PUI-IN MAK, RUI P.MARTINS, "High-/Mixed-Voltage RF and Analog CMOS Circuits Come of Age", *IEEE CAS Magazine*, vol.10, No.4, pp.27-39, 4th Quarter 2010.
35. U-FAT CHIO, HE-GONG WEI, YAN ZHU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, FRANCO MALOBERTI, "Design and Experimental Verification of a Power Effective Flash-SAR Subranging ADC", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.57, No.8, pp.607-611, August 2010.
34. PUI-IN MAK, RUI P.MARTINS, "A 2 \times V_{DD}-Enabled Mobile-TV RF Front-End with TV-GSM Interoperability in 1-V 90-nm CMOS", *IEEE Transactions on Microwave Theory and Techniques*, vol.58, No.7, pp.1664-1676, July 2010.
33. YAN ZHU, CHI-HANG CHAN, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, RUI PAULO MARTINS, FRANCO MALOBERTI, "A 10-bit 100-MS/s Reference-Free SAR ADC in 90 nm CMOS", *IEEE Journal of Solid-State Circuits*, vol.45, No.6, pp.1111-1121, June 2010. ["Most cited journal paper for the SKLAB – UM top five WOS (374 citations), 482 Google Scholar, 415 Scopus citations" – Aug.2020]
32. KA-FAI UN, PUI-IN MAK, RUI P.MARTINS, "Analysis and Design of Open-Loop Multiphase Local-Oscillator Generator for Wireless Applications", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.57, No.5, pp.970-981, May 2010.
31. YAN ZHU, U-FAT CHIO, HE-GONG WEI, SAI-WENG SIN, SENG-PAN U, R.P. MARTINS, "Linearity Analysis On A Series-Split Capacitor Array for High-Speed SAR ADCs", *Hindawi VLSI Design*, Special Issue with "Selected Papers from the Midwest Symposium on Circuits and Systems", vol.2010, Article ID 706548, <https://doi.org/10.1155/2010/706548>, (8 pages), April 2010.
30. HE-GONG WEI, U-FAT CHIO, YAN ZHU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Rapid Power-Switchable Track-and-Hold Amplifier in 90-nm CMOS", *IEEE Transactions on CAS – Part II: Express Briefs*, vol.57, No.1, pp.16-20, January 2010.
29. SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "1.2-V, 10-bit, 60–360MS/s Time-Interleaved Pipelined analog-to-digital converter in 0.18 μ m CMOS with Minimised Supply Headroom", *IET Proceedings – Circuits, Devices and Systems*, vol.4, No.1, pp.1-13, January 2010.
28. PUI-IN MAK, RUI MARTINS, "Design of an ESD-Protected Ultra-Wideband LNA in Nanoscale CMOS for Full-Band Mobile TV Tuners", *IEEE Transactions on CAS – Part I: Regular Papers*, vol.56, No.5, pp.933-942, May 2009. ["2010 Outstanding Young Author Award from IEEE CAS Society"]
27. CHON-TENG MA, PUI-IN MAK, MANG-I VAI, PENG-UN MAK, SIO-HANG PUN, WAN FENG, R.P.MARTINS, "Frequency-Bandwidth-Tunable Powerline Notch Filter for Biopotential Acquisition Systems", *IET Electronics Letters*, vol.45, No.4, pp.197-199, 12 February 2009.

26. SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Generalized Circuit Techniques for Low-Voltage High-Speed Reset- and Switched-Opamps", *IEEE Transactions on CAS - Part I: Regular Papers*, vol.55, No.8, pp.2188-2201, September 2008.
25. SAI-WENG SIN, U-FAT CHIO, SENG-PAN U, R.P.MARTINS, "Statistical Spectra and Distortion Analysis of Time-Interleaved Sampling Bandwidth Mismatch", *IEEE Transactions on CAS - Part II: Express Briefs*, vol.55, No.7, pp.648-652, July 2008.
24. PUI-IN MAK, SENG-PAN U, RUI P.MARTINS, "On the Design of a Programmable-Gain Amplifier with Built-in Compact DC-Offset Cancellers for Very Low-Voltage WLAN Systems", *IEEE Transactions on CAS - Part I: Regular Papers*, vol.55, No.2, pp.496-509, March 2008.
23. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "Experimental 1-V flexible-IF CMOS analogue-baseband chain for IEEE 802.11a/b/g WLAN receivers", *IET Circuits, Devices and Systems*, vol.1, No.6, pp.415-426, December 2007.
22. PHILLIP N. CHEONG, R.P.MARTINS, "Interactive IIR SC Multirate Compiler applied to Multistage Decimator Design", *Journal of Circuits, Systems, and Computers - World Scientific*, vol.16, No.4, pp.517-525, August 2007.
21. SIO-WENG TING, KAM-WENG TAM, RUI MARTINS, "Novel defected ground structure element with Triple Transmission Zeros and its application for Multispurious Suppression of Microstrip Parallel-Coupled-line Bandpass Filter", *Wiley Microwave and Optical Technology Letters*, vol.49, No.6, pp.1409-1412, June 2007.
20. PUI-IN MAK, SENG-PAN U, RUI P.MARTINS, "Transceiver Architecture Selection: Review, State-of-the-Art Survey and Case Study", *IEEE CAS Magazine*, vol.7, No.2, pp.6-25, 2nd Quarter 2007. ["Among the top 100 most downloaded papers from IEEE Xplore in June, July and August 2007"]
19. WAI-WA CHOI, KAM-WENG TAM, R.P.MARTINS, "Spurious Suppressed Microstrip Bandpass Filter with Two Transmission Zeros", *Wiley Microwave and Optical Technology Letters*, vol.48, No.10, pp.1979-1981, October 2006.
18. WAI-WA CHOI, KAM-WENG TAM, RUI MARTINS, "Design of Microwave Lumped and Transversal Bandpass Filter with Noise Reduction", *Wiley Microwave and Optical Technology Letters*, vol.48, No.6, pp.1161-1164, June 2006.
17. SIO-WENG TING, KAM-WENG TAM, R.P.MARTINS, "Miniaturized Microstrip Lowpass Filter with Wide Stopband using Double Equilateral U-shaped Defected Ground Structure", *IEEE Microwave and Wireless Components Letters*, vol.16, No.5, pp.240-242, May 2006.
16. SI-WENG FOK, PEDRO CHEONG, KAM-WENG TAM, RUI P.MARTINS, "A Novel Microstrip Square-Loop Dual-Mode Bandpass Filter with Simultaneous Size Reduction and Spurious Response Suppression", *IEEE Transactions on Microwave Theory and Techniques*, vol.54, No.5, pp.2033-2041, May 2006.
15. PUI-IN MAK, SENG-PAN U, RUI P.MARTINS, "Two-Step Channel Selection - A Novel Technique for Reconfigurable Multistandard Transceiver Front-Ends", *IEEE Transactions on CAS - Part I: Regular Papers*, vol.52, No.7, pp.1302-1315, July 2005.
14. SENG-PAN U, SAI-WENG SIN, R.P.MARTINS, "Exact Spectra Analysis of Sampled Signals with Jitter-Induced Nonuniformly Holding Effects", *IEEE Transactions on Instrumentation and Measurement*, vol.53, No.4, pp.1279-1288, August 2004.
13. SENG-PAN U, RUI P.MARTINS, J.E.FRANCA, "A 2.5-V 57-MHz 15-Tap SC Bandpass Interpolating Filter with 320-Ms/s Output for DDFS system in 0.35- μ m CMOS", *IEEE Journal of Solid-State Circuits*, vol.39, No.1, pp.87-99, January 2004.
12. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "Two-step Channel Selection Technique by Programmable Digital-Double Quadrature Sampling for Complex Low-IF Receivers", *IEE Electronics Letters*, vol.39, No.11, pp.825-827, 29 May 2003.
11. CHEONG NGAI, RUI P.MARTINS, JOSÉ E.FRANCA, "A Novel Algorithm for Automated Optimum Design of IIR SC Decimators", *IEEE Transactions on CAS - Part II: Analog and Digital Signal Processing*, vol.49, No.4, pp.293-296, April 2002.
10. SENG-PAN U, RUI P.MARTINS, JOSÉ E.FRANCA, "Improved Switched-Capacitor Interpolators with Reduced Sample-and-Hold Effects", *IEEE Transactions on CAS - Part II: Analog and Digital Signal Processing*, vol.47, No.8, pp.665-684, August 2000.
9. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "Offset- and Gain-Compensated and Mismatch-Free SC Delay Circuit with Flexible Implementation", *IEE Electronics Letters*, vol.35, No.3, pp.188-189, 4 February 1999.
8. KAM WENG TAM, PEDRO VITOR, RUI P.MARTINS, "MMIC Active Filter with Tuned Transversal Element", *IEEE Transactions on CAS - Part II: Analog and Digital Signal Processing*, vol.45, No.5, pp.632-634, May 1998.
7. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "Impulse Sampled FIR Interpolation with SC Active-Delayed Block Polyphase Structures", *IEE Electronics Letters*, vol.34, No.5, pp.443-444, 5 March 1998.
6. U. SENG PAN, R.P.MARTINS, J.E.FRANCA, "Switched-Capacitor Interpolators Without the Input Sample-and-Hold Filtering Effect", *IEE Electronics Letters*, vol.32, No.10, pp.879-881, 9 May 1996.
5. RUI P.MARTINS, JOSÉ E.FRANCA, "Cascade Switched-Capacitor IIR Decimating Filters", *IEEE Transactions on CAS - Part I: Fundamental Theory and Applications*, vol.42, No.7, pp.367-376, July 1995.
4. R.P.MARTINS, JOSÉ E.FRANCA, FRANCO MALOBERTI, "An Optimum CMOS Switched-Capacitor Antialiasing Decimating Filter", *IEEE Journal of Solid-State Circuits*, vol.28, No.9, pp.962-970, September 1993.

3. R.P.MARTINS, J.E.FRANCA, "Novel Second-Order Switched-Capacitor Interpolator", *IEE Electronics Letters*, vol.28, No.4, pp.348-350, 13 February 1992.
2. R.P.MARTINS, J.E.FRANCA, "Optimum Multistage Multirate Switched Capacitor Architectures for Highly Selective Interface Filtering", *IEE Electronics Letters*, vol.28, No.1, pp.72-75, 2 January 1992.
1. JOSÉ A.E.FRANCA, RUI P.MARTINS, "IIR Switched-Capacitor Decimator Building Blocks with Optimum Implementation", *IEEE Transactions on CAS*, vol.37, No.1, pp.81-90, January 1990.

Papers in conference proceedings (347)

[*ISCAS 58, ISSCC 57, A-SSCC 19*]

347. KAI XING, WEI WANG, YAN ZHU, CHI-HANG CHAN, R.P.MARTINS, "A 10.4mW 50MHz-BW 80dB-DR Single-Opamp Third-Order CTSDM with SABELD-Merged Integrator and 3-Stage Opamp", *Symposium on VLSI Circuits Digest of Technical Papers - VLSI 2020*, pp.1-2, June 2020.
346. FANGYU MAO, YAN LU, EDOARDO BONIZZONI, FILIPPO BOERA, MO HUANG, FRANCO MALOBERTI, R.P.MARTINS, "A Power-Efficient Hybrid Single-Inductor Bipolar-Output DC-DC Converter with Floating Negative Output for AMOLED Displays", *Proc. IEEE Custom Integrated Circuits Conference - CICC 2020*, pp.1-4, March 2020.
345. XIAOTENG ZHAO, YONG CHEN, PUI-IN MAK, R.P.MARTINS, "A 0.0285mm² 0.68pJ/bit Single-Loop Full-Rate Bang-Bang CDR without Reference and Separate Frequency Detector Achieving an 8.2(Gb/s)/ μ s Acquisition Speed of PAM-4 data in 28nm CMOS", *Proc. IEEE Custom Integrated Circuits Conference - CICC 2020*, pp.1-4, March 2020.
344. DONGYANG JIANG, LIANG QI, SAI-WENG SIN, FRANCO MALOBERTI, R.P.MARTINS, "A 5MHz-BW, 86.1dB-SNDR 4X Time-Interleaved 2nd-order $\Delta\Sigma$ Modulator with Digital Feedforward Extrapolation in 28nm CMOS", *Ph.D. Student Research Preview - IEEE International Solid-State Circuits Conference - ISSCC 2020*, San Francisco, USA, February 2020.
343. CHAO FAN, JUN YIN, CHEE-CHEOW LIM, PUI-IN MAK, R.P.MARTINS, "A 9mW 54.9-to-63.5GHz Current-Reuse LO Generator with a 186.7dBc/Hz FoM by Unifying a 20GHz 3rd-Harmonic-Rich Current-Output VCO, a Harmonic-Current Filter and a 60GHz TIA", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2020*, vol.63, pp.282-283, San Francisco, USA, February 2020.
342. ZIHAO ZHENG, LAI WEI, JORGE LAGOS, EWOUT MARTENS, YAN ZHU, CHI-HANG CHAN, JAN CRANINCKX, R.P.MARTINS, "A Single-Channel 5.5mW 3.3GS/s 6b Fully Dynamic Pipelined ADC with Post-Amplification Residue Generation", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2020*, vol.63, pp.254-255, San Francisco, USA, February 2020.
341. MINGLEI ZHANG, YAN ZHU, CHI-HANG CHAN, R.P.MARTINS, "A 4x Interleaved 10GS/s 8b Time-Domain ADC with 16x Interpolation-Based Inter-Stage Gain Achieving >37.5dB SNDR at 18GHz Input", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2020*, vol.63, pp.252-253, San Francisco, USA, February 2020.
340. MO HUANG, YAN LU, R.P.MARTINS, "A 2-Phase Soft-Charging Hybrid Boost Converter with Doubled-Switching Pulse Width and Shared Bootstrap Capacitor Achieving 93.5% Efficiency at a Conversion Ratio of 4.5", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2020*, vol.63, pp.198-199, San Francisco, USA, February 2020.
339. GENGZHEN QI, HAIJUN SHAO, PUI-IN MAK, JUN YIN, R.P.MARTINS, "A 1.4-to-2.7GHz FDD SAW-Less Transmitter for 5G-NR Using a BW-Extended N-Path Filter-Modulator, an Isolated-BB Input and a Wideband TIA-Based PA Driver Achieving <-157.5dBc/Hz OB Noise", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2020*, vol.63, pp.172-173, San Francisco, USA, February 2020.
338. YAN SONG, YAN ZHU, CHI-HANG CHAN, R.P.MARTINS, "A 2.56mW 40MHz-Bandwidth 75dB-SNDR Partial-Interleaving SAR-Assisted NS Pipeline ADC with Background Inter-Stage Offset Calibration", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2020*, vol.63, pp.164-165, San Francisco, USA, February 2020.
337. ZHICONG HUANG, IO WA IAM, IOK U HOI, CHI-LENG SAM, PUI-IN MAK, R.P.MARTINS, "Self-Contained Solar-Powered Inductive Power Transfer System for Wireless Electric Vehicle Charging", *Proc. IEEE PES Asia-Pacific Power and Energy Engineering Conference - APPEEC 2019*, pp.1-6, Macao, China, December 2019.
336. XIAOTENG ZHAO, YONG CHEN, PUI-IN MAK, R.P.MARTINS, "A 0.14-to-0.29-pJ/bit 14-GBaud/s Trimodal (NRZ/PAM-4/PAM-8) Half-Rate Bang-Bang Clock and Data Recovery Circuit (BBCDR) in 28-nm CMOS", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems - APCCAS 2019*, pp.229-232, Bangkok, Thailand, November 2019.
335. LINGSHAN KONG, YONG CHEN, HAOHONG YU, QUAN PAN, CHIRN CHYE BOON R.P.MARTINS, "Wideband Variable-Gain Amplifiers Based on a Pseudo-Current-Steering Gain-Tuning Technique", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems - APCCAS 2019*, pp.153-156, Bangkok, Thailand, November 2019.
334. JUNHAO LIANG, SAI-WENG SIN, SENG-PAN U, FRANCO MALOBERTI, R.P.MARTINS, HANJUN JIANG, "A High DR High-Input-Impedance Programmable-Gain ECG Acquisition Interface with Non-Inverting Continuous Time Sigma-Delta Modulator", *Proc. IEEE Asian Solid-State Circuits Conference - A-SSCC 2019*, pp.309-312, Macao, China, November 2019.

333. ZUNSONG YANG, YONG CHEN, PUI-IN MAK, R.P.MARTINS, "A 0.003-mm² 440f_{RMS}-Jitter and -64dBc-Reference-Spur Ring-VCO-Based Type-I PLL Using a Current Reuse Sampling Phase Detector in 28-nm CMOS", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2019*, pp.283-284, Macao, China, November 2019.
332. XIAOFEI LI, FANGYU MAO, PYUNGWOO YEON, YAN LU, MAYSAM GHOVANLOO, R.P.MARTINS, "A 200-MHz Wide-Input Range CMOS Passive Rectifier with Active Bias Tuning", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2019*, pp.245-246, Macao, China, November 2019.
331. ZHICONG HUANG, ZHIJIAN FANG, CHI-LENG SAM, PUI-IN MAK, R.P.MARTINS, "Design of Series/Series-Parallel Compensated Inductive Power Transfer Converter as Wireless Grid to Vehicle Interface", *Proc. IEEE Vehicle Power and Propulsion Conference – VPPC 2019*, pp.1-5, Hanoi, Vietnam, October 2019.
330. ZHICONG HUANG, ZHIJIAN FANG, CHI-LENG SAM, PUI-IN MAK, R.P.MARTINS, "Efficiency Optimization of Series/Series-Parallel IPT System with Load-Independent Output Voltage and Zero Input Phase Angle", (Invited Paper), *Proc. IEEE Energy Conversion Congress & Expo – ECCE 2019*, pp.3358-3362, Baltimore, USA, September/October 2019.
329. R.MARTINS, N.LOURENÇO, N.HORTA, JUN YIN, PUI-IN MAK, R.P.MARTINS, "Using EDA Tools to Push the Performance Boundaries of an Ultralow-Power IoT-VCO at 65nm", *Proc. 16th IEEE International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design – SMACD 2019*, pp.37-40, Lausanne, Switzerland, July 2019.
328. YAN LU, MO HUANG, R.P.MARTINS, "PID Control Considerations for Analog-Digital Hybrid Low-Dropout Regulators", (Invited Paper), *Proc. IEEE International Conference on Electron Devices and Solid State Circuits – EDSSC 2019*, pp.1-3, Xi'an, China, June 2019.
327. RUPING XIAO, MINGZHONG LI, MAN-KAY LAW, PUI-IN MAK, R.P.MARTINS, "A 0.45-V 70-nW QRS Detector Using Decimated Quadratic Spline Wavelet Transform and Window-based Extrema Difference Techniques", *Proc. IEEE International Conference on Electron Devices and Solid State Circuits – EDSSC 2019*, pp.1-3, Xi'an, China, June 2019.
326. YUKUN XU, MAN-KAY LAW, PUI-IN MAK, R.P.MARTINS, "A Curvature Compensated BJT-based TimeDomain Temperature Sensor With An Inaccuracy of ±0.7°C From -40°C to 125°C", *Proc. IEEE International Conference on Electron Devices and Solid State Circuits – EDSSC 2019*, pp.1-3, Xi'an, China, June 2019.
325. MINGQIANG GUO, JIAJI MAO, SAI-WENG SIN, HEGONG WEI, R.P.MARTINS, "A 29mW 5GS/s Time-interleaved SAR ADC achieving 48.5dB SNDR With Fully-Digital Timing-Skew Calibration Based on Digital-Mixing", *Symposium on VLSI Circuits Digest of Technical Papers – VLSI 2019*, pp.C76-C77, Kyoto, Japan, June 2019.
324. LAI WEI, XIANG-HUI PAN, CHI-HANG CHAN, YAN ZHU, R.P.MARTINS, "Input Correlated Swap-sampling Technique for Input Driver Power Reduction in a 12b 25MS/s SAR ADC", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2019*, pp.1-5, Sapporo, Hokkaido, Japan, May 2019.
323. JUN YIN, XI MENG, PUI-IN MAK, R.P.MARTINS, "Wideband MM-Wave CMOS VCOs – Switched Inductor, Mode-Switching Inductive Tuning, and Harmonic Extraction Techniques", *Proc. IEEE International Conference on Microwave and Millimeter Wave Technology – ICMMT 2019*, pp.1-3, Guangzhou, China, May 2019.
322. MINGQIANG GUO, JIAJI MAO, SAI-WENG SIN, HEGONG WEI, R.P.MARTINS, "A 10b 1.6GS/s 12.2mW 7/8-way Split Time-interleaved SAR ADC with Digital Background Mismatch Calibration", *Proc. IEEE Custom Integrated Circuits Conference – CICC 2019*, pp.1-4, Austin, Texas, USA, April 2019.
321. CHAO FAN, JINAN LUO, JUN YIN, PUI-IN MAK, R.P.MARTINS, "A 60GHz Frequency Generator Based on a 3rd-Harmonic Extraction Technique with Stacked Passive Harmonic Filter and Transimpedance Amplifier in 65 nm CMOS", *Ph.D. Student Research Preview – IEEE International Solid-State Circuits Conference – ISSCC 2019*, Session 3, Paper No.7, San Francisco, USA, February 2019.
320. MINGQIANG GUO, JIAJI MAO, SAI-WENG SIN, HEGONG WEI, R.P.MARTINS, "A 10b 5GS/s 29mW Time-Interleaved SAR ADC in 28nm CMOS with Phase Mismatch Calibration Achieving 47.2dB SNDR at 4GHz Input", *Ph.D. Student Research Preview – IEEE International Solid-State Circuits Conference – ISSCC 2019*, Session 2, Paper No.4, San Francisco, USA, February 2019.
319. ZHIYUAN CHEN, YANG JIANG, MAN-KAY LAW, PUI-IN MAK, XIAOYANG ZENG, RUI P. MARTINS, "A Piezoelectric Energy-Harvesting Interface Using Split-Phase Flipping-Capacitor Rectifier and Capacitor Reuse Multiple-VCR SC DC-DC Achieving 9.3×Energy-Extraction Improvement", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2019*, vol.62, pp.424-425, San Francisco, USA, February 2019.
318. HAO GUO, YONG CHEN, PUI-IN MAK, RUI P. MARTINS, "A 0.08mm² 25.5-to-29.9GHz Multi-Resonant-RLCM-Tank VCO Using a Single-Turn Multi-Tap Inductor and CM-Only Capacitors Achieving 191.6dBc/Hz FoM and 130kHz 1/f² PN Corner", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2019*, vol.62, pp.410-411, San Francisco, USA, February 2019.
317. WEI WANG, CHI-HANG CHAN, YAN ZHU, RUI P. MARTINS, "A 72.6dB-SNDR 100MHz-BW 16.36mW CTDSM with Preliminary Sampling and Quantization Scheme in Backend Subranging QTZ", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2019*, vol.62, pp.340-341, San Francisco, USA, February 2019.

316. LIANG QI, ANKESH JAIN, DONGYANG JIANG, SAI-WENG SIN, RUI P. MARTINS, MAURITS ORTMANN, "A 76.6dB-SNDR 50MHz-BW 29.2mW Noise-Coupling-Assisted CT Sturdy MASH $\Delta\Sigma$ Modulator with 1.5b/4b Quantizers in 28nm CMOS", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2019*, vol.62, pp.336-337, San Francisco, USA, February 2019.
315. ZUNSONG YANG, YONG CHEN, SHIHENG YANG, PUI-IN MAK, RUI P. MARTINS, "A 25.4-to-29.5GHz 10.2mW Isolated Sub-Sampling PLL Achieving -252.9dB Jitter-Power FoM and -63dBc Reference Spur", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2019*, vol.62, pp.270-271, San Francisco, USA, February 2019.
314. XIAOFENG YANG, CHI-HANG CHAN, YAN ZHU, RUI P. MARTINS, "A -246dB Jitter-FoM 2.4GHz Calibration-Free Ring-Oscillator PLL Achieving 9% Jitter Variation Over PVT", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2019*, vol.62, pp.260-261, San Francisco, USA, February 2019.
313. MINGLEI ZHANG, CHI-HANG CHAN, YAN ZHU, RUI P. MARTINS, "A 0.6V 13b 20MS/s Two-Step TDC-Assisted SAR ADC with PVT Tracking and Speed-Enhanced Techniques", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2019*, vol.62, pp.66-67, San Francisco, USA, February 2019.
312. WENNING JIANG, YAN ZHU, MINGLEI ZHANG, CHI-HANG CHAN, RUI P. MARTINS, "A 0.2V Energy-Harvesting BLE Transmitter with a Micropower Manager Achieving 25% System Efficiency at 0dBm Output and 5.2nW Sleep Power in 28nm CMOS", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2019*, vol.62, pp.60-61, San Francisco, USA, February 2019.
311. JIAO ZHAI, YUNYI LI, CHENG DONG, HAORAN LI, YANWEI JIA, PUI-IN MAK, R.P.MARTINS, "3D Microstructures to Realize Single Cell Culture on Digital Microfluidic Chip for Precise Medicine", *Proc. 22nd International Conference on Miniaturized Systems for Chemistry and Life Sciences - μ TAS 2018*, pp.1-2, Kaohsiung, Taiwan, November 2018.
310. HAORAN LI, YANWEI JIA, REN SHEN, TIANLAN CHEN, CHENG DONG, PUI-IN MAK, R.P.MARTINS, "On-chip Pico-pipette: A Method for Precise Delivery in a DMF system", *Proc. 22nd International Conference on Miniaturized Systems for Chemistry and Life Sciences - μ TAS 2018*, pp.1-2, Kaohsiung, Taiwan, November 2018.
309. KAI XU, JUN YIN, PUI-IN MAK, ROBERT BOGDAN STASZEWSKI, R.P.MARTINS, "A 2.4-GHz Single-Pin Antenna Interface RF Front-End with a Function-Reuse Single-MOS VCO-PA and a Push-Pull LNA", *Proc. IEEE Asian Solid-State Circuits Conference - A-SSCC 2018*, pp.293-294, Tainan, Taiwan, November 2018.
308. WENNING JIANG, YAN ZHU, CHI-HANG CHAN, BORIS MURMANN, SENG-PAN U, R.P.MARTINS, "A 7b 2 GS/s Time-Interleaved SAR ADC with Time Skew Calibration Based on Current Integrating Sampler", *Proc. IEEE Asian Solid-State Circuits Conference - A-SSCC 2018*, pp.235-238, Tainan, Taiwan, November 2018.
307. U-FAT CHIO, KUO-CHIH WEN, SAI-WENG SIN, CHI-SENG LAM, YAN LU, FRANCO MALOBERTI, R.P.MARTINS, "An Integrated DC-DC Converter with Segmented Frequency Modulation and Multiphase Co-Work Control for Fast Transient Recovery", *Proc. IEEE Asian Solid-State Circuits Conference - A-SSCC 2018*, pp.31-32, Tainan, Taiwan, November 2018.
306. JIANYANG DENG, CHI-SENG LAM, MAN-CHUNG WONG, LEI WANG, SAI-WENG SIN, R.P.MARTINS, "A Power Quality Indexes Measurement System Platform with Remote Alarm Notification", *Proc. 44th Annual Conference of the IEEE Industrial Electronics Society - IECON 2018*, pp.3461-3465, Washington D.C., USA, October 2018.
305. CHI-HANG CHAN, YAN ZHU, ZIHAO ZHENG, R.P.MARTINS, "A 39mW 7-b 8GS/s 8-way TI ADC with Cross-linearized Input and Bootstrapped Sampling Buffer Front-End", *Proc. IEEE European Solid-State Circuits Conference - ESSCIRC 2018*, pp.254-257, Dresden, Germany, September 2018.
304. R.MARTINS, N.LOURENÇO, N.HORTA, JUN YIN, PUI-IN MAK, R.P.MARTINS, "Design and Optimization of a Class-C/D VCO for Ultra-Low-Power IoT and Cellular Applications", *Proc. 15th IEEE International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design - SMACD 2018*, pp.129-132, Prague, Czech Republic, July 2018.
303. BIAO WANG, SAI-WENG SIN, SENG-PAN U, FRANCO MALOBERTI, R.P.MARTINS, "A 550 μ W 20kHz BW 100.8dB SNDR Linear-Exponential Multi-Bit Incremental Converter with 256-cycles in 65nm CMOS", *Symposium on VLSI Circuits Digest of Technical Papers - VLSI 2018*, pp.207-208, Hawaii, USA, June 2018.
302. YAN SONG, YAN ZHU, CHI-HANG CHAN, LI-GENG, R.P.MARTINS, "A 77dB SNDR 12.5MHz Bandwidth 0-1 MASH $\Sigma\Delta$ ADC Based on the Pipelined-SAR Structure", *Symposium on VLSI Circuits Digest of Technical Papers - VLSI 2018*, pp.203-204, Hawaii, USA, June 2018.
301. YAN LU, FANGYU MAO, R.P.MARTINS, "Bi-directional Battery-to-Battery Wireless Charging Enabled by Reconfigurable Wireless Power Transceivers", (Invited Paper), *Proc. IEEE International Conference on Electron Devices and Solid State Circuits - EDSSC 2018*, pp.1-2, Shenzhen, China, June 2018.
300. LIANG WAN, HAORAN LI, TIANLAN CHEN, CHENG DONG, YANWEI JIA, PUI-IN MAK, R.P.MARTINS, "In-minutes Polymerase Chain Reaction with Specific DNA Amplification on Digital Microfluidics with Sloppy Temperature Control", *Asia-Pacific Conference of Transducers and Micro-Nano Technology 2018 - APCOT 2018*, pp.1-2, Hong Kong SAR, China, June 2018.
299. YIWEI TAN, CHI-SENG LAM, SAI-WENG SIN, MAN-CHUNG WONG, R.P.MARTINS, "Design and Control of an Integrated 3-Level Boost Converter Under DCM Operation", *Proc. IEEE International Symposium on Circuits and Systems - ISCAS 2018*, pp.1-5, Florence, Italy, May 2018.

298. FANG-YU MAO, YAN LU, JIE LIN, CHENCHANG ZHAN, SENG-PAN U, R.P.MARTINS, "A Single-Stage Current-Mode Active Rectifier with Accurate Output-Current Regulation for IoT", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2018*, pp.1-4, Florence, Italy, May 2018.
297. YUANQING HUANG, YAN LU, FRANCO MALOBERTI, R.P.MARTINS, "A Dual-Loop Digital LDO Regulator with Asynchronous-Flash Binary Coarse Tuning", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2018*, pp.1-5, Florence, Italy, May 2018.
296. KA-MENG LEI, PUI-IN MAK, R.P.MARTINS, "A 0.4V 6.4 μ W 3.3MHz CMOS Bootstrap Relaxation Oscillator with $\pm 0.71\%$ Frequency Deviation over -30°C to 100°C for Wearable and Sensing Applications", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2018*, pp.1-5, Florence, Italy, May 2018.
295. FANGYU MAO, YAN LU, SENG-PAN U, R.P.MARTINS, "A 6.78 MHz Active Voltage Doubler with Near-Optimal On/Off Delay Compensation for Wireless Power Transfer Systems", *Proc. IEEE International Symposium on VLSI Design, Automation and Test– VLSI-DAT 2018*, pp.1-4, Hsinchu, Taiwan, April 2018.
294. JIAJI MAO, MINGQIANG GUO, SAI-WENG SIN, R.P.MARTINS, "A 14-bit Split Pipeline ADC with Self-Adjusted Opamp-Sharing Duty Cycle", *Ph.D. Student Research Preview - IEEE International Solid-State Circuits Conference – ISSCC 2018*, Session 3, Paper No.7, San Francisco, USA, February 2018.
293. JUN YIN, S. YANG, H. YI, WEI-HAN YU, PUI-IN MAK, R.P.MARTINS, "A 0.2V Energy-Harvesting BLE Transmitter with a Micropower Manager Achieving 25% System Efficiency at 0dBm Output and 5.2nW Sleep Power in 28nm CMOS", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2018*, vol.61, pp.450-451, San Francisco, USA, February 2018.
292. Y. JIANG, MAN-KAY LAW, PUI-IN MAK, R.P.MARTINS, "A 0.22-to-2.4V-Input Fine-Grained Fully Integrated Rational Buck-Boost SC DC-DC Converter Using Algorithmic Voltage-Feed-In (AVFI) Topology Achieving 84.1% Peak Efficiency at 13.2mW/mm²", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2018*, vol.61, pp.422-423, San Francisco, USA, February 2018.
291. C-C. LIM, JUN YIN, PUI-IN MAK, H. RAMIAH, R.P.MARTINS, "An Inverse-Class-F CMOS VCO with Intrinsic-High-Q 1st- and 2nd-Harmonic Resonances for 1/f²-to-1/f³ Phase-Noise Suppression Achieving 196.2dBc/Hz FOM", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2018*, vol.61, pp.374-375, San Francisco, USA, February 2018.
290. X. MA, YAN LU, R.P.MARTINS, Q. LI, "A 0.4V 430nA Quiescent Current NMOS Digital LDO with NAND-Based Analog-Assisted Loop in 28nm CMOS", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2018*, vol.61, pp.306-307, San Francisco, USA, February 2018.
289. F. MAO, YAN LU, SENG-PAN U, R.P.MARTINS, "A Reconfigurable Cross-Connected Wireless-Power Transceiver for Bidirectional Device-to-Device Charging with 78.1% Total Efficiency", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2018*, vol.61, pp.140-141, San Francisco, USA, February 2018.
288. S. YANG, JUN YIN, PUI-IN MAK, R.P.MARTINS, "A 0.0056mm² All-Digital MDLL Using Edge Re-Extraction, Dual-Ring VCOs and a 0.3mW Block-Sharing Frequency Tracking Loop Achieving 292fsrms Jitter and -249dB FOM", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2018*, vol.61, pp.118-119, San Francisco, USA, February 2018.
287. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, "Regulation-Free Sub-0.5V 16/24MHz Crystal Oscillator for Energy-Harvesting BLE Radios with 14.2nJ Startup Energy and 31.8 μ W Steady-State Power", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2018*, vol.61, pp.52-53, San Francisco, USA, February 2018.
286. JUNMIN JIANG, YAN LU, XUN LIU, WING-HUNG KI, PHILIP K.T. MOK, SENG-PAN U, R.P.MARTINS, "A Dual-Output SC Converter with Dynamic Power Allocation for Multi-Core Application Processors", *Proc. Asia and South Pacific Design Automation Conference – ASP-DAC 2018*, pp.285-286, Jeju, Korea, January 2018, ["*University LSI Design Contest Special Feature Award*"].
285. U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 5-bit 2 GS/s Binary-Search ADC with Charge-Steering Comparators", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2017*, pp.221-224, Seoul, Korea, November 2017.
284. WEI WANG, YAN ZHU, CHI-HANG CHAN, SENG-PAN U, R.P.MARTINS, "A 5.35 mW 10 MHz Bandwidth CT Third-Order $\Delta\Sigma$ Modulator with Single Opamp Achieving 79.6/84.5dB SNDR/DR in 65nm CMOS", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2017*, pp. 285-288, Seoul, Korea, November 2017.
283. CHI-WA U, CHI-SENG LAM, MAN-KAY LAW, SAI-WENG SIN, MAN-CHUNG WONG, SENG-PAN U, R.P.MARTINS, "CCM Operation Analysis and Parameters Design of Negative Output Elementary Luo Converter for Ripple Suppression", *Proc. IEEE Industrial Electronics Conference – IECON 2017*, pp.4867-4871, Beijing, China, October 2017.
282. LIANG WAN, TIANLAN CHEN, JIE GAO, CHENG DONG, YANWEI JIA, PUI-IN MAK, R.P.MARTINS, "Digital Microfluidic Platform for False-Positive-Free Loop-Mediated Isothermal Amplification", *Proc. International Conference on Miniaturized Systems for Chemistry and Life Sciences – MicroTAS 2017*, pp.1-2, Savannah, Georgia, USA, October 2017.
281. RUPING XIAO, MINGZHONG LI, MAN-KAY LAW, PUI-IN MAK, R.P.MARTINS, "Ultra-low Power QRS Detection using Adaptive Thresholding based on Forward Search Interval Technique", *Proc. IEEE Conference on Electron Devices and Solid-State Circuits – EDSSC 2017*, pp. 1-2, Hsinchu, Taiwan, October 2017.

280. BAOYI CEN, YANG JIANG, KWAN-TING NG, MAN-KAY LAW, PUI-IN MAK, R.P.MARTINS, "A Wide Range High Efficiency Fully Integrated Switched-Capacitor DC-DC Converter with Fixed Output Spectrum Modulation", *Proc. IEEE Conference on Electron Devices and Solid-State Circuits – EDSSC 2017*, pp. 1-2, Hsinchu, Taiwan, October 2017.
279. GUAN-CHENG WANG, YAN ZHU, CHI-HANG CHAN, SENG-PAN U, R.P.MARTINS, "A Missing-Code-Detection Gain Error Calibration Achieving 63dB SNR for An 11-bit ADC", *Proc. IEEE European Solid-State Circuits Conference – ESSCIRC 2017*, pp.239-242, Leuven, Belgium, September 2017.
278. XIA DU, CHI-SENG LAM, SAI-WENG SIN, FRANCO MALOBERTI, MAN-CHUNG WONG, SENG-PAN U, R.P.MARTINS, "A Digital PWM Controlled KY Step-Up Converter based on Frequency-Domain $\Sigma\Delta$ ADC", *Proc. IEEE International Symposium on Industrial Electronics – ISIE 2017*, pp.561-564, Edinburgh, Scotland, June 2017.
277. XIA DU, CHI-SENG LAM, SAI-WENG SIN, FRANCO MALOBERTI, MAN-CHUNG WONG, SENG-PAN U, R.P.MARTINS, "A Digital PWM Controlled KY Step-Up Converter based on Passive Sigma-Delta Modulator", *Proc. IEEE International Future Energy Electronics Conference – IFEEEC 2017*, pp.260-264, Kaohsiung, Taiwan, June 2017.
276. MINGQIANG GUO, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Split-Based Time-interleaved ADC with Digital Background Timing-skew Calibration", *Proc. IEEE Ph.D. Research in Microelectronics and Electronics Conference – PRIME 2017*, pp.113-116, Taormina, Italy, June 2017.
275. GENGZHEN QI, BAREND VAN LIEMPD, PUI-IN MAK, R.P.MARTINS, JAN CRANINCKX, "A 0.7 to 1 GHz Switched-LC N-Path LNA Resilient to FDD-LTE Self-Interference at ≥ 40 MHz Offset", *Proc. IEEE Radio Frequency Integrated Circuits Symposium – RFIC 2017*, pp.276-279, Honolulu, Hawaii, June 2017.
274. TAN-TAN ZHANG, MAN-KAY LAW, BO WANG, PUI-IN MAK, MANG-I VAI, R.P.MARTINS, "A 310nW 14.2-bit Iterative-Incremental ADC For Wearable Sensing Systems", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2017*, pp.1-4, Baltimore, USA, May 2017.
273. DAPENG SUN, MAN-KAY LAW, BO WANG, PUI-IN MAK, R.P.MARTINS, "Piecewise BJT Process Spread Compensation Exploiting Base Recombination Current", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2017*, pp.1-4, Baltimore, USA, May 2017.
272. KA-MENG LEI, PUI-IN MAK, R.P.MARTINS, "A 0.4V 4.8 μ W 16MHz CMOS Crystal Oscillator Achieving 74-fold Startup-Time Reduction Using Momentary Detuning", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2017*, pp.1-4, Baltimore, USA, May 2017.
271. YANG JIANG, MAN-KAY LAW, PUI-IN MAK, R.P.MARTINS, "A 0.23-2.4V Input Fully Integrated Buck-Boost SC DC-DC Converter With Cell-Spliced Power Stage and Domain-Adaptive Switch Drivers", *Ph.D. Student Research Preview - IEEE International Solid-State Circuits Conference – ISSCC 2017*, Session 3, Paper No. 1, San Francisco, USA, February 2017.
270. TAN-TAN ZHANG, MAN-KAY LAW, PUI-IN MAK, MANG-I VAI, R.P.MARTINS, "A 550nW MEMS Readout Using an Interactive-Incremental ADC Achieving Energy-Efficient Capacitance (1.2pJ/conv.-step) and Temperature (3.6nJ%²) Sensing", *Ph.D. Student Research Preview - IEEE International Solid-State Circuits Conference – ISSCC 2017*, Session 1, Paper No.1, San Francisco, USA, February 2017.
269. WEI-HAN YU, HAIDONG YI, PUI-IN MAK, JUN YIN, R.P.MARTINS, "A 0.18V 382 μ W Bluetooth Low-Energy (BLE) Receiver with 1.33nW Sleep Power for Energy-Harvesting Applications in 28nm CMOS", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2017*, vol.60, pp.414-415, San Francisco, USA, February 2017.
268. MO HUANG, YAN LU, SENG-PAN U, R.P.MARTINS, "A Reconfigurable Bidirectional Wireless Power Transceiver with Maximum-Current Charging Mode and 58.6% Battery-to-Battery Efficiency", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2017*, vol.60, pp.376-377, San Francisco, USA, February 2017 [“*Takuo Sugano Award for Outstanding Far-East Paper*”].
267. ZHIYUAN CHEN, MAN-KAY LAW, PUI-IN MAK, WING-HUNG KI, R.P.MARTINS, "A 1.7mm² Inductor-less Fully-Integrated Flipping-Capacitor Rectifier (FCR) for Piezoelectric Energy Harvesting with 483% Power Extraction Enhancement", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2017*, vol.60, pp.372-373, San Francisco, USA, February 2017.
266. JUNMIN JIANG, YAN LU, WING-HUNG KI, SENG-PAN U, R.P.MARTINS, "A Dual-Symmetrical-Output Switched-Capacitor Converter with Dynamic Power Cells and Minimized Cross Regulation for Application Processors in 28nm CMOS", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2017*, vol.60, pp.344-345, San Francisco, USA, February 2017.
265. MO HUANG, YAN LU, SENG-PAN U, R.P.MARTINS, "An Output-Capacitor-Free Analog-Assisted Digital Low-Dropout Regulator with Tri-Loop Control", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2017*, vol.60, pp.342-343, San Francisco, USA, February 2017.
264. CHI-HANG CHAN, YAN ZHU, IOK-MENG HO, WAI-HONG ZHANG, SENG-PAN U, R.P.MARTINS, "A 5mW 7b 2.4GS/s 1-then-2b/cycle SAR ADC with Background Offset Calibration", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2017*, vol.60, pp.282-283, San Francisco, USA, February 2017.

263. WEI LI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 94-dB DR, 105-Hz Bandwidth Interface Circuit for Inertial Navigation Applications", *Proc. IEEE International Symposium on Integrated Circuits – ISIC 2016*, Singapore, December 2016.
262. JIE GAO, LIANG WAN, YANWEI JIA, TIANLAN CHEN, CHENG DONG, HAORAN LI, SHUN LIU, PUI-IN MAK, R.P.MARTINS, "A Thermal Digital Microfluidic Device and Its Application to Disease Diagnostics", *Lab on a Chip International Symposium: Droplet-based Microfluidics*, Hang Zhou, China, November 2016.
261. LIANG WAN, TIANLAN CHEN, JIE GAO, CHENG DONG, YANWEI JIA, PUI-IN MAK, R.P.MARTINS, "Digital microfluidic system for LAMP-based detection of Trypanosoma brucei using molecular beacon probes", *Lab on a Chip International Symposium: Droplet-based Microfluidics*, Hang Zhou, China, November 2016.
260. CHI-HANG CHAN, YAN ZHU, IOK-MENG HO, WAI-HONG ZHANG, CHON-LAM LIO, SENG-PAN U, R.P.MARTINS, "A 0.011mm² 60dB SNDR 100MS/s Reference Error Calibrated SAR ADC with 3pF Decoupling Capacitance for Reference Voltages", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2016*, pp.145-148, Toyama, Japan, November 2016.
259. YUAN REN, SAI-WENG SIN, CHI-SENG LAM, MAN-CHUNG WONG, SENG-PAN U, R.P.MARTINS, "A High DR Multi-Channel Stage-Shared Hybrid Front-End for Integrated Power Electronics Controller", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2016*, pp.57-60, Toyama, Japan, November 2016.
258. MO HUANG, YAN LU, SENG-PAN U, R.P.MARTINS, "A Digital LDO with Transient Enhancement and Limit Cycle Oscillation Reduction", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2016*, pp.25-28, Jeju, South-Korea, October 2016.
257. CHENG DONG, YANWEI JIA, TIANLAN CHEN, JIE GAO, LIANG WAN, PUI-IN MAK, MANG I VAI, R.P.MARTINS, "Digital Microfluidic Chip with Blade Structures for Precise Droplet Splitting", *Proc. International Conference on Miniaturized Systems for Chemistry and Life Sciences – MicroTAS 2016*, Dublin, Ireland, October 2016.
256. TIANLAN CHEN, YANWEI JIA, CHENG DONG, JIE GAO, LIANG WAN, PUI-IN MAK, R.P.MARTINS, "A Calibration-Free Thermal Digital Microfluidic Device for Ultrafast DNA Melting Curve Analysis", *Proc. International Conference on Miniaturized Systems for Chemistry and Life Sciences – MicroTAS 2016*, Dublin, Ireland, October 2016.
255. DANTE G. MURATORE, ALPER AKDIKIMEN, EDOARDO BONIZZONI, FRANCO MALOBERTI, U-FAT CHIO, SAI-WENG SIN, R.P.MARTINS, "An 8-bit 0.7-GS/s Single Channel Flash-SAR ADC in 65-nm CMOS Technology", *Proc. IEEE European Solid-State Circuits Conference – ESSCIRC 2016*, pp.421-424, Lausanne, Switzerland, September 2016.
254. JIANYU ZHONG, YAN ZHU, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 12b 180MS/s 0.068mm² Pipelined-SAR ADC with Merged-residue DAC for Noise Reduction", *Proc. IEEE European Solid-State Circuits Conference – ESSCIRC 2016*, pp.169-172, Lausanne, Switzerland, September 2016.
253. BIAO WANG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A High Resolution Multi-Bit Incremental Converter Insensitive to DAC Mismatch Error", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conference – PRIME 2016*, pp.1-4, Lisbon, Portugal, June 2016.
252. TIANLAN CHEN, JIE GAO, CHENG DONG, YANWEI JIA, PUI-IN MAK, R.P.MARTINS, "Digital Microfluidic System with Intelligent Control for Ultrafast DNA Analysis", *Proc. 8th International Symposium on Microchemistry and Microsystems – ISMM 2016*, Hong Kong, China, May 2016.
251. CHEE-CHEOW LIM, HARIKRISHNAN RAMIAH, JUN YIN, PUI-IN MAK, R.P.MARTINS, "A High-Q Spiral Inductor with Dual-Layer Patterned Floating Shield in a Class-B VCO with a 190.5-dBc/Hz FoM", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2016*, pp.2759-2762, Montreal, Canada, May 2016.
250. WEI-HAN YU, XINGQIANG PENG, PUI-IN MAK, R.P.MARTINS, "A 2.4-GHz Digitally-Modulated Class-D Polar PA Using Power-Gating, Interactive AM-AM Modulation and a Dynamic Matching Network for Battery Lifetime Extension", *Ph.D. Student Research Preview, IEEE International Solid-State Circuits Conference – ISSCC 2016*, Session 3, Paper No.2, San Francisco, USA, February 2016.
249. CHIO-IN IEONG, MINGZHONG LI, MAN-KAY LAW, PUI-IN MAK, MANG I VAI, R.P.MARTINS, "A 0.45V 147-to-375nW Hardware-Efficient Real-Time ECG Processor with Lossless-to-Lossy Data Compression for Wireless Healthcare Wearables", *Ph.D. Student Research Preview - IEEE International Solid-State Circuits Conference – ISSCC 2016*, Session 2, Paper No.3, San Francisco, USA, February 2016.
248. QI LIANG, SAI-WENG SIN, R.P.MARTINS, "A 12.5-ENOB 5MHz BW 4.2mW DT Multirate 2-1 Mash $\Delta\Sigma$ Modulator with Horizontal/Vertical Opamp Sharing in 65nm CMOS", *Ph.D. Student Research Preview - IEEE International Solid-State Circuits Conference – ISSCC 2016*, Session 1, Paper No.1, San Francisco, USA, February 2016.
247. KA-MENG LEI, HADI HEIDARI, PUI-IN MAK, MAN-KAY LAW, FRANCO MALOBERTI, R.P.MARTINS, "A Handheld 50pM-Sensitivity Micro-NMR CMOS Platform with B-Field Stabilization for Multy-Type Biological/Chemical Assays", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2016*, vol. 59, pp.474-475, San Francisco, USA, February 2016 [*"Silk-Road Award for a Ph.D. Student from IEEE R-10"*].
246. GENGZHEN, PUI-IN MAK, R.P.MARTINS, "A 0.038mm² SAW-less Multiband Transceiver using an N-Path SC Gain Loop", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2016*, vol. 59, pp.452-453, San Francisco, USA, February 2016.

245. JUN YIN, PUI-IN MAK, FRANCO MALOBERTI, R.P.MARTINS, "A 0.003mm² 1.7-to-3.5GHz Dual Mode Time-Interleaved Ring-VCO Achieving 90-to-150kHz 1/f³ Phase-Noise Corner", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2016*, vol. 59, pp.48-49, San Francisco, USA, February 2016.
244. CHIO-IN IEONG, PUI-IN MAK, MANG-I VAI, R.P.MARTINS, "Sub- μ W QRS Detection Processor Using Quadratic Spline Wavelet Transform and Maxima Modulus Pair Recognition for Power-Efficient Wireless Arrhythmia Monitoring", *Proc. Asia and South Pacific Design Automation Conference – ASP-DAC 2016*, (1S-11), pp.21-22, Macao, China, January 2016.
243. MING-ZHONG LI, CHIO-IN IEONG, MAN-KAY LAW, PUI-IN MAK, MANG-I VAI, SIO-HANG PUN, R.P.MARTINS, "Sub-threshold VLSI Logic Family Exploiting Unbalanced Pull-up/down Network, Logical Effort and Inverse-Narrow-Width Techniques", *Proc. Asia and South Pacific Design Automation Conference – ASP-DAC 2016*, (1S-8), pp.15-16, Macao, China, January 2016.
242. CHAK-FONG CHEANG, KA-FAI UN, PUI-IN MAK, R.P.MARTINS, "Time-Domain I/Q-LOFT Compensator Using a Simple Envelope Detector for a Sub-GHz IEEE 802.11af WLAN Transmitter", *Proc. Asia and South Pacific Design Automation Conference – ASP-DAC 2016*, (1S-2), pp.3-4, Macao, China, January 2016.
241. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, "A μ NMR CMOS Transceiver using a Butterfly-Coil Input for Co-Integration with a Digital Microfluidic Device inside a Portable Magnet", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2015*, (19-1), pp.1-4, Xiamen, Fujian, China, November 2015. **[Distinguished Design Award/Student Design Contest]**
240. JIANWEI LIU, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 89fJ-FOM 6-bit 3.4GS/s Flash ADC with 4x Time-Domain Interpolation", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2015*, (16-2), pp.1-4, Xiamen, Fujian, China, November 2015.
239. MO HUANG, YAN LU, XIAOMING XIONG, SENG-PAN U, R.P.MARTINS, "An All-Factor Modulation Bandwidth Extension Technique for Delta-Sigma PLL Transmitter", *Proc. IEEE Region 10 Conference – TENCON 2015*, pp.1-4, Macao, China, November 2015. **[Professional Award]**
238. WEN MING ZHENG, CHI-SENG LAM, SAI-WENG SIN, YAN LU, MAN-CHUNG WONG, SENG-PAN U, R.P.MARTINS, "Capacitive Floating Level Shifter: Modeling and Design", *Proc. IEEE Region 10 Conference – TENCON 2015*, pp.1-6, Macao, China, November 2015.
237. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, "A Thermal-Insensitive All-Electronic Modular μ NMR Relaxometer with a 2D Digital Microfluidic Chip for Sample Management", *Proc. International Conference on Miniaturized Systems for Chemistry and Life Sciences – MicroTAS 2015*, Gyeongju, South Korea, pp.302-304, October 2015.
236. SANFENG LU, MAN-KAY LAW, PUI-IN MAK, R.P.MARTINS, "Multi-Range, Ultra-Low-Power, -20 to 60°C CMOS Smart Temperature Sensor with $\pm 0.1^\circ\text{C}$ Inaccuracy", *Proc. International Symposium on Signals, Circuits and Systems – ISSCS 2015*, Iasi, Romania, pp. 1-4, July 2015.
235. HAOJUAN DAI, YAN LU, MAN-KAY LAW, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Review and Design of the On-Chip Rectifiers for RF Energy Harvesting", *Proc. IEEE Wireless Symposium – IWS 2015*, pp.1-4, Shenzhen, China, March/April, 2015.
234. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, "A Multi-Step Multi-Sample μ NMR Relaxometer Using Inside-Magnet Digital Microfluidics and a Butterfly-Coil-Input CMOS Transceiver", *Ph.D. Student Research Preview, IEEE International Solid-State Circuits Conference – ISSCC 2015*, Session 2, Paper No.1, San Francisco, USA, February 2015.
233. JIANYU ZHONG, YAN ZHU, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 12b 180MS/s 0.068mm² Full-Calibration Integrated Pipelined-SAR ADC", *Ph.D. Student Research Preview - IEEE International Solid-State Circuits Conference – ISSCC 2015*, San Francisco, USA, February 2015.
232. CHI-HANG CHAN, YAN ZHU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 5.5mW 6b 5GS/s 4x-Interleaved 3b/cycle SAR ADC in 65nm CMOS", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2015*, vol. 58, pp.466-467, San Francisco, USA, February 2015. **[IEEE SSSCS Pre-Doctoral Achievement Award]**.
231. YAN LU, JUNMIN JIANG, WING-HUNG KI, C.PATRICK YUE, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 123-Phase DC-DC Converter-Ring with Fast-DVS for Microprocessors", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2015*, vol. 58, pp.364-365, San Francisco, USA, February 2015.
230. ZHICHENG LIN, PUI-IN MAK, R.P.MARTINS, "A 0.028mm² 11mW Single-Mixing Blocker-Tolerant Receiver with Double-RF N-Path Filtering, S11 Centering, +13dBm OB-IIP3 and 1.5-to-2.9dB NF", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2015*, vol. 58, pp.36-37, San Francisco, USA, February 2015. **[IEEE SSSCS Pre-Doctoral Achievement Award]**.
229. SU-YAN FAN, MAN-KAY LAW, PUI-IN MAK, R.P.MARTINS, "A 0.3-V, 37.5-nW 1.5~6.5-pF-Input-Range Supply Voltage Tolerant Capacitive Sensor Readout", *Proc. IEEE International Symposium on Integrated Circuits – ISIC 2014*, pp.388-391, Singapore, December 2014.
228. DIYANG ZHAO, KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, "Design Considerations of a Low-Noise Receiver Front-End and its Spiral Coil for Portable NMR Screening", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2014*, pp.403-406, Ishigaki, Okinawa, Japan, November 2014. **[Student Travel Grant Award]**
227. SHIHENG YANG, PUI-IN MAK, R.P.MARTINS, "A 104 μ W EMI-Resisting Bandgap Voltage Reference of a -20dB PSRR, and 5% DC Shift under a 4dBm EMI Level", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2014*, pp.57-60, Ishigaki, Okinawa, Japan, November 2014.

226. CHENG DONG, TIANLAN CHEN, JIE GAO, YANWEI JIA, PUI-IN MAK, MANG-I VAI, R.P.MARTINS, "Electrical Actuation on Digital Microfluidics with a Ta2O5 Insulating Layer: a Comparison Study", *SELECTBIO Lab-on-a-Chip Asia 2014*, Microfluidics and Point-of-Care Diagnostics, Poster Session, Singapore, November 2014.
225. TIANLAN CHEN, CHENG DONG, JIE GAO, YANWEI JIA, PUI-IN MAK, MANG-I VAI, R.P.MARTINS, "Time-Regulated Actuation Signal for Enhancement of Droplet Transportation in Digital Microfluidics," *SELECTBIO Lab-on-a-Chip Asia 2014*, Microfluidics and Point-of-Care Diagnostics, Poster Session, Singapore, November 2014.
224. YAN ZHU, CHI-HANG CHAN, SENG-PAN U, R.P.MARTINS, "An 11b 900 MS/s Time-Interleaved Sub-ranging Pipelined-SAR ADC", *Proc. IEEE European Solid-State Circuits Conference - ESSCIRC 2014*, pp.211-214, Venice, Italy, September 2014. [Best Paper Award]
223. JIE GAO, TIANLAN CHEN, CHENG DONG, YANWEI JIA, PUI-IN MAK, R.P.Martins, "The Fabrication and Application of a Robust and Intelligent Digital Microfluidics," *Proc. International Conf. for Top and Emerging Materials Scientists - IC-TEMS 2014*, Paper No. 6, Zhuhai, China, July 2014.
222. XINGQIANG PENG, WEI-HAN YU, PUI-IN MAK, R.P.MARTINS, "A 26.3 dBm 2.5 to 6 GHz Wideband Class-D Switched-Capacitor Power Amplifier with 40% Peak PAE", *Proc. IEEE International Conf. on Electron Devices & Solid-State Circuits - EDSSC 2014*, pp.1-2, Chengdu, China, June 2014.
221. DA FENG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, FRANCO MALOBERTI, "Jitter-Resistant Capacitor Based Sine-Shaped DAC for Continuous-Time Sigma-Delta Modulators", *Proc. IEEE International Symp. on Circuits and Systems - ISCAS 2014*, pp.1348-1351, Melbourne, Australia, May 2014.
220. WANG WEI, ZUSHU YAN, PUI-IN MAK, R.P.MARTINS, "Micropower Two-Stage Amplifier Employing Recycling Current-Buffer Miller Compensation", *Proc. IEEE International Symp. on Circuits and Systems - ISCAS 2014*, pp.1889-1992, Melbourne, Australia, May 2014. [Finalist of Student Best Paper Award]
219. ZHAO YAOHUA, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, "Switched-Current-Assisting and Pre-Charging Techniques for SC Lowpass Filters", *Ph.D. Student Research Preview - IEEE International Solid-State Circuits Conference - ISSCC 2014*, San Francisco, USA, February 2014.
218. ZUSHU YAN, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, FRANCO MALOBERTI, "A 0.0013mm² 3.6μW Nested-Current-Mirror Single-Stage Amplifier Driving 0.15-to-15nF Capacitive Loads with >62° Phase Margin", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2014*, vol.57, pp.288-289, San Francisco, USA, February 2014 [IEEE SCS Pre-Doctoral Achievement Award].
217. ZHICHENG LIN, PUI-IN MAK, R.P.MARTINS, "A 0.5V 1.15mW 0.2mm² Sub-GHz ZigBee Receiver Supporting 433/860/915/960MHz ISM Bands with Zero External Components", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2014*, vol. 57, pp.164-165, San Francisco, USA, February 2014. [Invited for JSSC] [Selected as ISSCC 2014 Technical Highlight, p.55, ISSCC 2014 Press Kit]
216. FUJIAN LIN, PUI-IN MAK, R.P.MARTINS, "An RF-to-BB-Current-Reuse Wideband Receiver with Parallel N-Path Active/Passive Mixers and a Single-MOS Pole-Zero LPF", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2014*, vol. 57, pp.74-75, San Francisco, USA, February 2014.
215. YANWEI JIA, PUI-IN MAK, CONNER MASSEY, R.P.MARTINS, LAWRENCE J. WANGH, "Dried-down Reagents on a Microfluidic Chip for LATE-PCR Amplification and Detection of Single-stranded DNA", *SELECTBIO Lab-on-a-Chip Asia 2013*, Track A Poster Session, Singapore, November 2013.
214. JIE GAO, TIANLAN CHEN, PUI-IN MAK, MANG-I VAI, R.P.MARTINS, "An Intelligent Digital Microfluidics with Autonomous Positioning and Fuzzy-Enhanced Feedback Control", *SELECTBIO Lab-on-a-Chip Asia 2013*, Track A Poster Session, Singapore, November 2013.
213. YAOHUA ZHAO, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, "A 0.127-mm², 5.6-mW, 5th-Order SC LPF with +23.5-dBm IIP3 and 1.5-to-15-MHz Clock-Defined Bandwidth in 65-nm CMOS", *Proc. IEEE Asian Solid-State Circuits Conference - A-SSCC 2013*, pp.361-364, Singapore, November 2013.
212. LI DING, WENLAN WU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 13-bit 60M Split Pipelined ADC with Background Gain and Mismatch Error Calibration", *Proc. IEEE Asian Solid-State Circuits Conference - A-SSCC 2013*, pp.77-80, Singapore, November 2013.
211. YAN ZHU, CHI-HANG CHAN, SENG-PAN U, R.P.MARTINS, "A 10.4-ENOB 120MS/s SAR ADC with DAC Linearity Calibration in 90nm CMOS", *Proc. IEEE Asian Solid-State Circuits Conference - A-SSCC 2013*, pp.69-72, Singapore, November 2013.
210. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, "A 2.93μW 8-Bit Capacitance-to-RF Converter for Movable Laboratory Mice Blood Pressure Monitoring", *Proc. IEEE Asia Symposium on Quality Electronic Design - ASQED 2013*, pp.216-219, Penang, Malaysia, August 2013 [Best Paper Award].
209. GENG-ZHEN QI, KA-FAI UN, WEI-HAN YU, PUI-IN MAK, R.P.MARTINS, "A Wideband Multi-Stage Inverter-Based Driver Amplifier for IEEE 802.22 WRAN Transmitters", *Proc. IEEE Asia Symposium on Quality Electronic Design - ASQED 2013*, pp.6-9, Penang, Malaysia, August 2013.
208. LI DING, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Background Gain-Calibration Technique for Low Voltage Pipelined ADCs Based on Nonlinear Interpolation", *Proc. IEEE Midwest Sympos. on Circuits and Systems - MWSCAS 2013*, pp.665-668, Columbus, Ohio, USA, August 2013.

207. MING-ZHONG LI, CHIO-IN IEONG, MAN KAY LAW, PUI-IN MAK, MANG-I VAI, R.P.MARTINS, "Sub-threshold Standard Cell Library Design for Ultra-Low Power Biomedical Applications", *Proc. International Conference of the IEEE in Engineering in Medicine and Biology Society - EMBC 2013*, pp.1454-1457, Osaka, Japan, July 2013.
206. ZHIYUAN CHEN, MAN-KAY LAW, PUI-IN MAK, R.P.MARTINS, "Optimization of Microwatt On-Chip Charge Pump for Single-Chip Solar Energy Harvesting", *Proc. IEEE International Conference of Electron Devices and Solid-State Circuits - EDSSC 2013*, Hong Kong, China, June 2013.
205. TAO WU, MAN-KAY LAW, PUI-IN MAK, R.P.MARTINS, "An Ultra-Low Power CMOS Smart Temperature Sensor for Clinical Temperature Monitoring", *Proc. IEEE International Conference of Electron Devices and Solid-State Circuits - EDSSC 2013*, Hong Kong, China, June 2013.
204. CHIO-IN IEONG, MINGZHONG LI, MAN-KAY LAW, PUI-IN MAK, MANG-I VAI, PENG-UN MAK, FENG WAN, R.P.MARTINS, "Standard Cell Library Design with Voltage Scaling and Transistor Sizing for Ultra-Low-Power Biomedical Applications", *Proc. IEEE International Conference of Electron Devices and Solid-State Circuits - EDSSC 2013*, Hong Kong, China, June 2013.
203. MD.TAWFIQ AMIN, PUI-IN MAK, R.P.MARTINS, "A 0.5V 10GHz 8-Phase LC-VCO Combining Current-Reuse and Back-Gate-Coupling Techniques Consuming 2mW", *Proc. IEEE International Symp. on Circuits and Systems - ISCAS 2013*, pp.2698-2701, Beijing, China, May 2013.
202. WEN-LAN WU, YAN ZHU, U-FAT CHIO, LI DING, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 0.6V 8B 100MS/s SAR ADC with Minimized DAC Capacitance and Switching Energy in 65nm CMOS", *Proc. IEEE International Symp. on Circuits and Systems - ISCAS 2013*, pp.2239-2242, Beijing, China, May 2013.
201. JIANGCHAO WU, MAN-KAY LAW, PUI-IN MAK, R.P.MARTINS, "A 1.83 μ W, 0.78 μ Vrms Input Referred Noise Neural Recording Front End", *Proc. IEEE International Symp. on Circuits and Systems - ISCAS 2013*, pp.405-408, Beijing, China, May 2013.
200. YUN DU, TAO HE, YANG JIANG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Continuous-Time VCO-Assisted VCO-Based $\Sigma\Delta$ Modulator with 76.6dB SNDR and 10MHz BW", *Proc. IEEE International Symp. on Circuits and Systems - ISCAS 2013*, pp.373-376, Beijing, China, May 2013.
199. ZUSHU YAN, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, "0.0064mm² 12.6 μ W Three-Stage Amplifier with 1.38MHz GBW at 1nF Capacitive Load", *Ph.D. Student Research Preview - IEEE International Solid-State Circuits Conference - ISSCC 2013*, San Francisco, USA, February 2013.
198. ZHICHENG LIN, PUI-IN MAK, R.P.MARTINS, "A 1.7mW 0.22mm² 2.4GHz ZigBee RX Exploiting a Current-Reuse Blixer + Hybrid Filter Topology in 65nm CMOS", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference - ISSCC 2013*, vol. 56, pp.448-449, San Francisco, USA, February 2013.
197. WEN-LAN WU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 10-bit SAR ADC With Two Redundant Decisions and Splitting-MSB-Cap DAC Array", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems - APCCAS 2012*, pp.268-271, Kaohsiung, Taiwan, December 2012.
196. YINSIDI JIAO, WEI-HAN YU, PUI-IN MAK, R.P.MARTINS, "A Dynamic-Range-Improved 2.4GHz WLAN Class-E PA Combining PWPM and Cascode Modulation", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems - APCCAS 2012*, pp.148-151, Kaohsiung, Taiwan, December 2012.
195. TAO HE, YUN DU, YANG JIANG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A DT 0-2 MASH $\Sigma\Delta$ Modulator with VCO-Based Quantizer for Enhanced Linearity", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems - APCCAS 2012*, pp. 33-36, Kaohsiung, Taiwan, December 2012.
194. YUN DU, TAO HE, YANG JIANG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Robust NTF Zero Optimization Technique for both Low and High OSRs Sigma-Delta Modulators", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems - APCCAS 2012*, pp.29-32, Kaohsiung, Taiwan, December 2012.
193. YANJIE XIAO, TANTAN ZHANG, PUI-IN MAK, MAN-KAY LAW R.P.MARTINS, "A 0.8- μ W 8-Bit 1.5~20-pF-Input-Range Capacitance-to-Digital Converter for Lab-on-Chip Digital Microfluidics Systems", *Proc. IEEE Conference on Biomedical Circuits and Systems BIOCAS 2012*, pp.384-387, Hsinchu, Taiwan, November 2012.
192. ZHIJIE CHEN, YANG JIANG, CHENYAN CAI, HE-GONG WEI, SAI-WEN SIN, SENG-PAN U, ZHIHUA WANG, R.P.MARTINS, "A 22.4 μ W 80dB SNDR $\Sigma\Delta$ Modulator with Passive Analog Adder and SAR Quantizer for EMG Application", *Proc. IEEE Asian Solid-State Circuits Conference - A-SSCC 2012*, pp.257-260, Kobe, Japan, November 2012.
191. JIANYU ZHONG, YAN ZHU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Inter-Stage Gain Error Self-Calibration of a 31.5fJ 10b 470MS/s Pipelined-SAR ADC", *Proc. IEEE Asian Solid-State Circuits Conference - A-SSCC 2012*, pp.153-156, Kobe, Japan, November 2012.
190. SI-SENG WONG, U-FAT CHIO, YAN ZHU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 2.3mW 10-bit 170MS/s Two-Step Binary-Search Assisted Time-Interleaved SAR ADC", *Proc. IEEE Custom Integrated Circuits Conference - CICC 2012*, San Jose, California, USA, September 2012.
189. GUOHE YIN, HE-GONG WEI, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, ZHIHUA WANG, R.P.MARTINS, "A 0.024 mm² 4.9 fJ 10-bit 2 MS/s SAR ADC in 65 nm CMOS", *Proc. IEEE European Solid-State Circuits Conference - ESSCIRC 2012*, pp.377-380, Bordeaux, France, September 2012.
188. RUI WANG, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, ZHIHUA WANG, R.P.MARTINS, "A 12-Bit 110MS/s 4-Stage Single-Opamp Pipelined SAR ADC with Ratio-Based GEC Technique", *Proc. IEEE European Solid-State Circuits Conference - ESSCIRC 2012*, pp.265-268, Bordeaux, France, September 2012.

187. CHEN-YAN CAI, YANG JIANG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "An ELD Tracking Compensation Technique for Active-RC CT $\Sigma\Delta$ Modulators", *Proc. IEEE Midwest Sympos. on Circuits and Systems – MWSCAS 2012*, pp.1096-1099, Boise, Idaho, USA, August 2012.
186. YAN ZHU, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 34fJ 10b 500 MS/s Partial-Interleaving Pipelined SAR ADC", *Symposium on VLSI Circuits Digest of Technical Papers – VLSI 2012*, pp.90-91, Hawaii, USA, June 2012.
185. CHI-HANG CHAN, YAN ZHU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 3.8mW 8b 1GS/s 2b/cycle Interleaving SAR ADC with Compact DAC Structure", *Symposium on VLSI Circuits Digest of Technical Papers – VLSI 2012*, pp.86-87, Hawaii, USA, June 2012. ["Student Travel Grant Award"].
184. MIGUEL A. MARTINS, PUI-IN MAK, R.P.MARTINS, "A 0.02-to-6GHz SDR Balun-LNA Using a Triple-Stage Inverter-Based Amplifier", *Proc. IEEE International Symp. on Circuits and Systems – ISCAS 2012*, pp.472-475, Seoul, South Korea, May 2012.
183. TAO HE, YANG JIANG, YUN DU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 10MHz BW 78dB DR CT $\Sigma\Delta$ Modulator with Novel Switched High Linearity VCO-Based Quantizer", *Proc. IEEE International Symp. on Circuits and Systems – ISCAS 2012*, pp.65-68, Seoul, South Korea, May 2012.
182. ZHUSHU YAN, PUI-IN MAK, R.P.MARTINS, "A 0.016mm² 144 μ W Three-Stage Amplifier Capable of Driving 1-to-15nF Capacitive Load with >0.95MHz GBW", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2012*, vol. 55, pp.368-369, San Francisco, USA, February 2012.
181. SENG-PAN U, SAI-WENG SIN, YAN ZHU, U-FAT CHIO, HE-GONG WEI, R.P.MARTINS, "Design Techniques for Nanometer Wideband Power-Efficient CMOS ADCs", *Proc. IEEE International Symposium on Radio-Frequency Integration Technology – RFIT 2011*, pp.173-176, Beijing, China, December 2011.
180. ARSHAD HUSSAIN, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Hybrid Loopfilter Sigma-Delta Modulator With NTF Zero Compensation", *Proc. IEEE International SoC Design Conference – ISOCC 2011*, pp. 76-79, Jeju, South Korea, November 2011.
179. CHI-HANG CHAN, YAN ZHU, U-FAT CHIO, HE-GONG WEI, CHI-HANG CHAN, HOU-LON CHOI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Reconfigurable Low-Noise Dynamic Comparator with Offset Calibration in 90nm CMOS", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2011*, pp.233-237, Jeju, South-Korea, November 2011.
178. SI-SENG WONG, U-FAT CHIO, HE-GONG WEI, CHI-HANG CHAN, HOU-LON CHOI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 5-bit 500MS/s Comparator-Strengthening Binary-Search ADC", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2011*, pp.73-76, Jeju, South-Korea, November 2011.
177. YAN ZHU, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 35 fJ 10b 160 MS/s Pipelined-SAR ADC with Decoupled Flip-Around MDAC and Self-Embedded Offset Cancellation", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2011*, pp. 61-64, Jeju, South-Korea, November 2011. ["Student Paper Award – Most voted"].
176. MIAO LIU, PUI-IN MAK, YAO-HUA ZHAO, R.P.MARTINS, "A Double Active-Decoupling Technique for Reducing Package Effects in a Cognitive-Radio Balun-LNA", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA 2011*, pp.131-134, Macao, China, October 2011. ["Student Paper Award – Gold Leaf Certificate"].
175. U-WAI LOK, PUI-IN MAK, WEI-HAN YU, R.P.MARTINS, "A Novel Digital Predistortion Technique for Class-E PA with Delay Mismatch Estimation", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA 2011*, pp.119-122, Macao, China, October 2011. ["Student Paper Award – Silver Leaf Certificate"].
174. ARSHAD HUSSAIN, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "NTF Zero Compensation Technique for Passive Sigma-Delta Modulator", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA 2011*, pp.82-85, Macao, China, October 2011.
173. BO SUN, U-FAT CHIO, CHI-SENG LAM, NING-YI DAI, MAN-CHUNG WONG, CHI-KONG WONG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A FPGA-Based Power Electronics Controller for Hybrid Active Power Filters", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA 2011*, pp.25-28, Macao, China, October 2011.
172. RUI WANG, U-FAT CHIO, CHI-HANG CHAN, LI DING, SAI-WENG SIN, SENG-PAN U, ZHIHUA WANG, R.P.MARTINS, "A Time-Efficient Dither-Injection Scheme for Pipeline SAR ADC", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA 2011*, pp.9-12, Macao, China, October 2011.
171. YUAN FEI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Nonlinearity Digital Background Calibration Algorithm for 2.5bit/stage Pipelined ADCs with Opamp sharing Architecture", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA 2011*, pp.1-4, Macao, China, October 2011. ["Student Paper Award – Bronze Leaf Certificate"].
170. U-FAT CHIO, CHI-HANG CHAN, HOU-LON CHOI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 7-bit 300-MS/s Subranging ADC with Embedded Threshold & Gain-Loss Calibration", *Proc. IEEE European Solid-State Circuits Conference – ESSCIRC 2011*, pp.363-366, Helsinki, Finland, September 2011.
169. TAN-TAN ZHANG, PUI-IN MAK, MANG-I VAI, PENG-UN MAK, FENG WAN, R.P.MARTINS, "An Ultra-Low-Power Filtering Technique for Biomedical Applications", *Proc. 33rd IEEE International Conference of Engineering in Medicine and Biology Society – EMBC 2011*, pp.1859-1862, Boston, Massachusetts, USA, August 2011.

168. TAO HE, YUN DU, YANG JIANG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Dual-VCO-Based Quantizer with Highly Improved Linearity and Enlarged Dynamic Range", *Proc. IEEE Midwest Symposium on Circuits and Systems – MWSCAS 2011*, Seoul, Korea, August 2011.
167. ZHONG JIAN YU, YAN ZHU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Multi-Merged-Switched Redundant Capacitive DACs for 2b/cycle SAR ADC", *Proc. IEEE Midwest Symposium on Circuits and Systems – MWSCAS 2011*, Seoul, Korea, August 2011.
166. ZHIJIE CHEN, PENG ZHANG, HE-GONG WEI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, ZHIHUA WANG, "Noise Shaping Implementation in Two-Step/SAR ADC Architectures Based on Delayed Quantization Error", *Proc. IEEE Midwest Symposium on Circuits and Systems – MWSCAS 2011*, Seoul, Korea, August 2011.
165. PENG ZHANG, ZHIJIE CHEN, HE-GONG WEI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, ZHIHUA WANG, "A Charge Pump Based Timing-Skew Calibration for Time-Interleaved ADC", *Proc. IEEE Midwest Sympos. on Circuits and Systems – MWSCAS 2011*, Seoul, Korea, August 2011.
164. YANG JIANG, CHEN-YAN CAI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Clock-Jitter Sensitivity Reduction in CT Sigma-Delta Modulators Using Voltage-Crossing Detection DAC", *Proc. IEEE Midwest Symposium on Circuits and Systems – MWSCAS 2011*, Seoul, Korea, August 2011.
163. CHEN-YAN CAI, YANG JIANG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Passive Excess-Loop-Delay Compensation Technique for Gm-C Based Continuous-Time Sigma-Delta Modulators", *Proc. IEEE Midwest Symposium on Circuits and Systems – MWSCAS 2011*, Seoul, Korea, August 2011.
162. BO SUN, NING-YI DAI, U-FAT CHIO, MAN-CHUNG WONG, CHI-KONG WONG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "FPGA-based Decoupled Double Synchronous Reference Frame PLL for Active Power Filters", *Proc. 6th IEEE Conference on Industrial Electronics and Applications – ICIEA 2011*, Beijing, China, June 2011.
161. MIGUEL A. MARTINS, PUI-IN MAK, R.P.MARTINS, "A Single-to-Differential LNA Topology with Robust Output Gain-Phase Balancing against Balun Imbalance", *Proc. IEEE International Symp. on Circuits and Systems – ISCAS 2011*, pp.289-292, Rio de Janeiro, Brazil, May 2011.
160. MIAO LIU, PUI-IN MAK, ZUSHU YAN, R.P.MARTINS, "A High-Voltage-Enabled Recycling Folded Cascode Opamp for Nanoscale CMOS Technologies", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2011*, pp.33-36, Rio de Janeiro, Brazil, May 2011.
159. WENG-FAI CHENG, KA-FAI UN, PUI-IN MAK, R.P.MARTINS, "A Linearity-Improved Ultra-Wideband Balun-LNA for Cognitive Radio", *Proc. IEEE International Conference on Computer as a Tool – EUROCON 2011*, Lisboa, Portugal, April 2011.
158. HE-GONG WEI, CHI-HANG CHAN, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, F.MALOBERTI, "A 0.024mm² 8-bit 400 MS/s SAR ADC with 2-bit/Cycle and Resistive DAC in 65 nm CMOS", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2011*, vol. 54, pp.188-190, San Francisco, USA, February 2011 [*"Silk-Road Award for a Ph.D. Student from IEEE R-10"*].
157. PUI-IN MAK, R.P.MARTINS, "A 0.46mm² 4dB-NF Unified Receiver Front-End for Full-Band Mobile TV in 65nm CMOS", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2011*, vol. 54, pp.172-174, San Francisco, USA, February 2011.
156. GUOHE YIN, U-FAT CHIO, HE-GONG WEI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "An Ultra Low Power 9-bit 1-MS/s Pipelined SAR ADC for Bio-medical Applications", *Proc. IEEE International Conference on Electronics, Circuits, and Systems – ICECS 2010*, pp.878-881, Athens, Greece, December 2010.
155. YANG JIANG, KIM-FAI WONG, CHEN-YAN CAI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, ZHIHUA WANG, "A Fixed-Pulse Shape Feedback Technique with Reduced Clock-Jitter Sensitivity in Continuous-Time Sigma-Delta Modulators", *Proc. IEEE International Conference on Electronics, Circuits, and Systems – ICECS 2010*, pp.547-550, Athens, Greece, December 2010.
154. YANG JIANG, KIM-FAI WONG, CHEN-YAN CAI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Reduced Jitter-Sensitivity Clock Generation Technique for Continuous-Time $\Sigma\Delta$ Modulators", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2010*, pp.1011-1014, Kuala Lumpur, Malaysia, December 2010.
153. LI DING, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "An Efficient DAC and Interstage Gain Error Calibration Technique for Multi-bit Pipelined ADCs", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2010*, pp.208-211, Kuala Lumpur, Malaysia, December 2010.
152. HE-GONG WEI, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Process-insensitive Current-Controlled Delay Generator with Threshold Voltage Compensation", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2010*, session 8-4, Beijing, China, November 2010.
151. PUI-IN MAK, R.P.MARTINS, "A Novel Response-Translating Lowpass Filter Achieving 1.4-to-15-Hz Tunable Cutoff for Bio-potential Acquisition Systems", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conf. Asia – PRIMEASIA 2010*, pp.404-407, Shanghai, China, September 2010.
150. PUI-IN MAK, R.P.MARTINS, "A 28- μ W EEG Readout Front-End Utilizing a Current-Mode Instrumentation Amplifier and a Source-Follower-Based LPF", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conf. Asia – PRIMEASIA 2010*, pp.396-399, Shanghai, China, September 2010.
149. FEI YUAN, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Digital Background Nonlinearity Calibration Algorithm for Pipelined ADCs", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conf. Asia – PRIMEASIA 2010*, pp.115-118, Shanghai, China, September 2010.

148. SAI-WENG SIN, LI DING, YAN ZHU, HE-GONG WEI, CHI-HANG CHAN, U-FAT CHIO, SENG-PAN U, R.P.MARTINS, F.MALOBERTI, "An 11b 60MS/S 2.1mW Two-Step Time-Interleaved SAR-ADC with Reused S&H", *Proc. IEEE European Solid-State Circuits Conference – ESSCIRC 2010*, pp.218-221, Seville, Spain, September 2010.
147. YAN ZHU, CHI-HANG CHAN, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Parasitics Nonlinearity Cancellation Technique for Split DAC Architecture by Using Capacitive Charge-Pump", *Proc. IEEE International Midwest Symposium on Circuits and Systems – MWSCAS 2010*, pp.889-892, Seattle, USA, August 2010.
146. KIM-FAI WONG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Level-Shifting Variable Current Charging Technique for High-Speed Comparator-Based Switched-Capacitor Circuits", *Proc. IEEE International Midwest Symposium on Circuits and Systems – MWSCAS 2010*, pp.566-569, Seattle, USA, August 2010.
145. CHI-HANG CHAN, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Threshold-Embedded Offset Calibration Technique for Inverter-Based Flash ADCs", *Proc. IEEE International Midwest Symposium on Circuits and Systems – MWSCAS 2010*, pp.489-492, Seattle, USA, August 2010.
144. SI-SENG WONG, U-FAT CHIO, HOU-LON CHOI, CHI-HANG CHAN, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Power Effective 5-bit 600 MS/s Binary-Search ADC with Simplified Switching", *Proc. IEEE International Midwest Symposium on Circuits and Systems – MWSCAS 2010*, pp.29-32, Seattle, USA, August 2010.
143. LI DING, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Background Amplifier Offset Calibration Technique for High-Resolution Pipelined ADC", *Proc. IEEE International NEWCAS Conference – NEWCAS 2010*, pp.41-44, Montreal, Canada, June 2010.
142. YAN ZHU, CHI-HANG CHAN, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Voltage Feedback Charge Compensation Technique for Split DAC Architecture in SAR ADCs", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2010*, pp.4061-4064, Paris, France, May-June 2010.
141. MIGUEL A MARTINS, KA-FAI UN, PUI-IN MAK, R.P.MARTINS, "SC Biquad Filter with Hybrid Utilization of OpAmp and Comparator-Based Circuit", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2010*, pp.1276-1279, Paris, France, May-June 2010.
140. LI DING, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Noise-Insensitive Offset Calibration Technique for Time Interleaved SAR ADC", *Proc. IEEE International Symposium on Circuits and Systems – LASCAS 2010*, Iguacu Falls, Brazil, February 2010.
139. CHEOK-TENG LEI, SENG-PAN U, R.P.MARTINS, "High-Speed Robust Level Converter for Ultra-Low Power 0.6-V LSIs to 3.3-V I/O", *Proc. IEEE International SoC Design Conference – ISOCC 2009*, pp.396-399, Busan, Korea, November 2009.
138. CHI-HANG CHAN, YAN ZHU, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Voltage-Controlled Capacitance Offset Calibration Technique for High Resolution Dynamic Comparator", *Proc. IEEE International SoC Design Conference – ISOCC 2009*, pp.392-395, Busan, Korea, November 2009.
137. SI-SENG WONG, YAN ZHU, CHI-HANG CHAN, U-FAT CHIO, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Parasitic Calibration by Two-Step Ratio Approaching Technique for Split Capacitor Array SAR ADCs", *Proc. IEEE International SoC Design Conference – ISOCC 2009*, pp.333-336, Busan, Korea, November 2009.
136. CHANG-HAO CHEN, PUI-IN MAK, TAN-TAN ZHANG, MANG-I VAI, PENG-UN MAK, SIO-HANG PUN, FENG WANG, R.P.MARTINS, "A 2.4 Hz-to-10 kHz-Tunable Biopotential Filter using a Novel Capacitor Multiplier", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA 2009*, pp.372-375, Shanghai, China, September 2009.
135. KENG-WAI LO, PUI-IN MAK, R.P.MARTINS, "An Active-Balun LNA with Forestage-Poststage Gain Controls for VHF/UHF Mobile-TV Tuners", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA 2009*, pp.165-168, Shanghai, China, September 2009 ["Gold Leaf Certificate"].
134. U-FAT CHIO, HOU-LON CHOI, CHI-HANG CHAN, SI-SENG WONG, SAI-WENG SIN, HE-GONG WEI, SENG-PAN U, R.P.MARTINS, "Comparator-Based Successive Folding ADC", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA 2009*, pp.117-120, Shanghai, China, September 2009 ["Silver Leaf Certificate"].
133. SAI-WENG SIN, HE-GONG WEI, U-FAT CHIO, YAN ZHU, SENG-PAN U, R.P.MARTINS, F.MALOBERTI, "On-Chip Small Capacitor Mismatches Measurement Technique using Beta-Multiplier-Biased Ring Oscillator", *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2009*, pp.49-52, Taipei, Taiwan, November 2009.
132. KIM-FAI WONG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Modified Charging Algorithm for Comparator-Based Switched-Capacitor Circuits", *Proc. IEEE International Midwest Symposium on Circuits and Systems – MWSCAS 2009*, pp.86-89, Cancun, Mexico, August 2009.
131. PUI-IN MAK, R.P.MARTINS, "A $2 \times V_{DD}$ 90nm-CMOS RF Front-End using a Cascode-Cascade-Inverter LNA for TV-on-Mobile", *Symposium on VLSI Circuits Digest of Technical Papers – VLSI 2009*, pp.278-279, Kyoto, Japan, June 2009.
130. CHON-TENG MA, PUI-IN MAK, MANG-I VAI, PENG-UN MAK, SIO-HANG PUN, WAN FENG, R.P.MARTINS, "A 90nm CMOS Bio-Potential Signals Readout Front-End Utilizing a Novel Chopper Notch Filter for Powerline Interference Rejection", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2009*, pp.665-668, Taipei, Taiwan, May 2009.

129. KA-FAI UN, PUI-IN MAK, R.P.MARTINS, "An Open-Loop Multiphase (360°-div-by-8) Local Oscillator Generator with High-Precision Correlated Phases for Mobile-TV Tuners", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2009*, pp.433-436, Taipei, Taiwan, May 2009.
128. KA-FAI UN, PUI-IN MAK, R.P.MARTINS, "A DC-Offset-Compensated, CT/DT Hybrid Filter with Process-Insensitive Cutoff and Low In-Band Group-Delay Variation for WLAN Receivers", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2008*, pp.1360-1363, Macao, China, December 2008 ["Certificate of Merit for Student Paper"].
127. HE-GONG WEI, U-FAT CHIO, YAN ZHU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Process- and Temperature- insensitive Current-Controlled Delay Generator for Sampled-Data Systems", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2008*, pp.1192-1195, Macao, China, December 2008.
126. U-FAT CHIO, HE-GONG WEI, YAN ZHU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Self-Timing Switch-Driving Register by Precharge-Evaluate Logic for High-Speed SAR ADCs", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2008*, pp.1164-1167, Macao, China, December 2008.
125. KIM-FAI WONG, KA-IAN LEI, SENG-PAN U, R.P.MARTINS, "A 1-V 90dB DR Audio Stereo DAC with embedding Headphone Driver", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2008*, pp.1160-1163, Macao, China, December 2008.
124. NGAI KONG, SENG-PAN U, R.P.MARTINS, "A Novel CMOS Switched-Current Mode Sequential Shift Forward Inference Circuit for Fuzzy Logic Controller", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2008*, pp.396-399, Macao, China, December 2008.
123. LI DING, SIO CHAN, KIM-FAI WONG, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Pseudo-Differential Comparator-Based Pipelined ADC with Common Mode Feedforward Technique", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2008*, pp.276-279, Macao, China, December 2008.
122. YAN ZHU, U-FAT CHIO, HE-GONG WEI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Power-Efficient Capacitor Structure for High-Speed Charge Recycling SAR ADCs", *Proc. IEEE International Conference on Electronics, Circuits, and Systems – ICECS 2008*, pp.642-645, Malta, September 2008.
121. YAN ZHU, U-FAT CHIO, HE-GONG WEI, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Linearity Analysis on a Series-Split Capacitor Array for High-Speed SAR ADCs", *Proc. IEEE International Midwest Symposium on Circuits and Systems – MWSCAS 2008*, pp.922-925, Knoxville, USA, August 2008.
120. CHON-TENG MA, PUI-IN MAK, MANG-I VAI, PENG-UN MAK, SIO-HANG PUN,, R.P.MARTINS, "Design of a Low-Power Low-Noise Bio-Potential Readout Front-End in CMOS", *Proc. Regional Inter-University Graduate Conference on Electrical Engineering – RIUGCEE 2008*, ID G-03/1-4, Xi'an, China, July 2008.
119. PUI-IN MAK, KA-HOU AO IEONG, R.P.MARTINS, "An Open-Source-Input, Ultra-Wideband LNA with Mixed-Voltage ESD Protection for Full-Band (170-to-1700 MHz) Mobile TV Tuners", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2008*, pp.668-671, Seattle, USA, May 2008.
118. HE-GONG WEI, U-FAT CHIO, YAN ZHU, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Power Scalable 6-Bit 1.2GS/S Flash ADC with Power on/Off Track-and-Hold and Preamplifier", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2008*, pp.5-8, Seattle, USA, May 2008.
117. HE-GONG WEI, CHON-KIT LAI, SENG-PAN U, R.P.MARTINS, "A 100MS/s recycling 2-step ADC embedding Programmable Gain Amplification for DVB Satellite", *Proc. IEEE International Midwest Symposium on Circuits and Systems – MWSCAS 2007*, Vol.I, pp.132-135, Montreal, Canada, August 2007.
116. NGAI KONG, SENG-PAN U, R.P.MARTINS, "A Novel Reconfigurable Membership Function Circuit for Analog Fuzzy Logic Controller", *Proceedings 20th China Symposium on Circuits and Systems – CSCAS 2007*, pp. 163-168, Guangzhou, China, June 2007.
115. WENG-IEUNG MOK, PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "A Highly-Linear Successive-Approximation Front-End Digitizer with Built-in Sample-and-Hold Function for Pipeline/Two-Step ADC", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2007*, pp.1947-1950, New Orleans, USA, May 2007.
114. KA-HOU AO IEONG, SENG-PAN U, R.P.MARTINS, "A 1-V 2.5mW Transient-Improved Current-Steering DAC using Charge-Removal-Replacement Technique", *Proc. IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS 2006*, pp.183-186, Singapore, December 2006.
113. KA-HOU AO IEONG, SENG-PAN U, R.P.MARTINS, "Design of a 1-V 10-bit 120MS/s Current-Steering DAC with Transient-Improved Technique", *Proc. IEEE/IEE Regional Inter-University Post-graduate EEE Conference – RIUPEEEC 2006*, pp.137-140, Macao, China, July 2006 ["Certificate of Merit"].
112. SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Novel Timing-Skew-Insensitive, Multi-phase Clock Generation Scheme for Parallel DAC and N-Path Filter", *Proc. IEEE/IEE Regional Inter-University Post-graduate EEE Conference – RIUPEEEC 2006*, pp.133-136, Macao, China, July 2006 ["Certificate of Merit"].
111. WENG-IEUNG MOK, PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "A Novel Architecture of Comparator-Mismatch-Free Multi-bit Pipeline ADC", *Proc. IEEE/IEE Regional Inter-University Post-graduate EEE Conference – RIUPEEEC 2006*, pp.129-132, Macao, China, July 2006.

110. JUN-XIA MA, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A 1.8V 1.056GS/s 6-B Flash-Interpolation ADC for MB-OFDM UWB Applications", *Proc. IEEE/IEE Regional Inter-University Post-graduate EEE Conference – RIUPEEEC 2006*, pp.105-108, Macao, China, July 2006.
109. NGAI KONG, SENG-PAN U, R.P.MARTINS, "A Novel Current-Mode Reconfigurable Membership Function Circuit for Mixed-Signal Fuzzy Hardware", *Proc. IEEE/IEE Regional Inter-University Post-graduate EEE Conference – RIUPEEEC 2006*, pp.101-104, Macao, China, July 2006.
108. CHON IN LAO, SENG-PAN U, R.P.MARTINS, "An Expandable and Extendable High-Order Semi-MASH Sigma Delta Modulator", *Proc. IEEE/IEE Regional Inter-University Post-graduate EEE Conference – RIUPEEEC 2006*, pp.68-73, Macao, China, July 2006.
107. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "A 1-V 14mW-per-Channel Flexible-IF CMOS Analog-Baseband IC for 802.11a/b/g Receivers", *Symposium on VLSI Circuits Digest of Technical Papers - VLSI 2006*, pp.288-289, Honolulu, Hawaii, USA, June 2006.
106. SIO-WENG TING, KAM WENG TAM, R.P.MARTINS, "Compact Microstrip Quasi-Elliptic Bandpass Filter using Open-Loop Dumbbell shaped Defected Ground Structure", *Digest of Technical Papers from IEEE International Microwave Symposium - IMS 2006*, pp.527-530, San Francisco, USA, June 2006.
105. JUN-XIA MA, SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Power-Efficient 1.056 GS/s Resolution-Switchable 5-bit/6-bit Flash ADC for UWB Applications", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2006*, pp.4305-4308, Kos, Greece, May 2006.
104. SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Novel Low-Voltage Finite-Gain Compensation Technique for High-Speed Reset- and Switched-Opamp Circuits", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2006*, pp.3794-3797, Kos, Greece, May 2006.
103. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "Design and Test Strategy underlying a Low-Voltage Analog-Baseband IC for 802.11a/b/g WLAN SiP Receivers", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2006*, pp.2473-2476, Kos, Greece, May 2006.
102. KIN-SANG CHIO, SENG-PAN U, R.P.MARTINS, "A Dual-Mode Low-Distortion Sigma-Delta Modulator with Relaxing Comparator Accuracy", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2006*, pp.1892-1895, Kos, Greece, May 2006.
101. CHON-IN LAO, SENG-PAN U, R.P.MARTINS, "A Novel Effective Bandpass Semi-MASH Sigma-Delta Modulator with Double-Sampling Mismatch-Free Resonator", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2006*, pp. 581- 584, Kos, Greece, May 2006.
100. WAI-WA CHOI, KAM-WENG TAM, R.P.MARTINS, "A Novel Microstrip Transversal Bandpass Filter with simultaneous Size Reduction and Spurious Responses Suppression", *Proc. IEEE Asia-Pacific Microwave Conference – APMC 2005*, vol. 1 (4pp.), Suzhou, China, December 2005.
99. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "A 1-V Transient-Free and DC-Offset-Canceled PGA with a 17.1-MHz Constant Bandwidth over 52-dB Control Range in 0.35- μ m CMOS", *Proc. IEEE Custom Integrated Circuits Conf. – CICC 2005*, pp.649-652, San Jose, California, USA, September 2005.
98. SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Novel Low-Voltage Circuit Techniques for Fully-Differential Reset- and Switched-Opamps", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conf. – PRIME 2005*, Volume II, pp.398-401, Lausanne, Switzerland, July 2005.
97. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "Multistandard-Compliant Receiver Architecture with Low-Voltage Implementation", *Proc. IEEE Ph.d. Research in Microelectronics and Electronics Conference – PRIME 2005*, Volume I, pp.223-226, Lausanne, Switzerland, July 2005 ["*Silver Leaf Certificate*"].
96. WENG-IENG MOK, PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "On-Chip Unsteady Reference Voltage Compensation Techniques for Very-High-Speed Pipelined ADC", *Proc. IEEE/IEE Regional Inter-University Post-graduate EEE Conference – RIUPEEEC 2005*, Hong Kong, China, July 2005 ["*Certificate of Merit*"].
95. SIO-WENG TING, KAM-WENG TAM, R.P.MARTINS, "Microstrip Two-Section Dual-Band Impedance Transformer Design with Spurious Matching Suppression", *Proc. IEEE/IEE Regional Inter-University Post-graduate EEE Conference – RIUPEEEC 2005*, Hong Kong, China, July 2005.
94. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "A 1V IEEE 802.11a/b/g-Compliant Receiver IF-to-Baseband Chip in 0.35 μ m CMOS for Low-Cost Wireless SiP", *52nd Edition International Solid-State Circuits Conference – ISSCC 2005*, San Francisco, USA, February 2005, and *42nd Edition Design Automation Conference – DAC 2005*, Anaheim, California, USA, June 2005 ["*Student Design Contest – Second Place, Conceptual Category*" – Referred in *IEEE Solid-State Circuits Society Newsletter*, Vol.10, No.3, pp.7-8, September 2005].
93. SI-WENG FOK, PEDRO CHEONG, KAM-WENG TAM, R.P.MARTINS, "Microstrip Dual-Mode Bandpass Filter Design with simultaneous Size Reduction & Spurious Response Suppression", *Digest of Technical Papers from IEEE International Microwave Symposium - IMS 2005*, pp.2175-2178, Long Beach, USA, June 2005.
92. WAI-WA CHOI, KAM-WENG TAM, R.P.MARTINS, "Improvement of Gain Compression in Microwave Lumped and Transversal Bandpass Filters", *Digest of Technical Papers from IEEE International Microwave Symposium - IMS 2005*, pp.2171-2174, Long Beach, USA, June 2005.
91. KIN-SANG CHIO, SENG-PAN U, R.P.MARTINS, "A Robust 3rd. Order Low-Distortion Multi-bit Sigma-Delta Modulator with Reduced Number of Op-Amps for WCDMA", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2005*, pp. 3099-3102, Kobe, Japan, May 2005.
90. CHON-IN LAO, SENG-PAN U, R.P.MARTINS, "A Novel Semi-MASH Sub-stage for High-order Cascade Sigma-Delta Modulators", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2005*, pp. 3095-3098, Kobe, Japan, May 2005.

89. **SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Novel Low-Voltage Cross-Coupled Passive Sampling Branch for Reset- and Switched-Opamp Circuits", *Proc. IEEE Intern. Symp. on Circuits and Systems – ISCAS 2005*, pp. 1585-1588, Kobe, Japan, May 2005 ["Certificate of Merit"].**
88. SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Novel Very Low-Voltage SC-CMFB Technique for Fully-Differential Reset-Opamp Circuits", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2005*, pp. 1581-1584, Kobe, Japan, May 2005.
87. SI-WENG FOK, PEDRO CHEONG, KAM-WENG TAM, R.P.MARTINS, "A Novel Microstrip Bandpass Filter Design using Assymetric Parallel Coupled-Line", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2005*, pp. 404-407, Kobe, Japan, May 2005.
86. KA-HOU AO IEONG, CHONG-YIN FOK, PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "A Frequency Up-Conversion and Two-Step Channel Selection Embedded CMOS D/A Interface", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2005*, pp. 392-395, Kobe, Japan, May 2005.
85. S.I.HONG, SI-WENG FOK, WAI-WA CHOI, KAM-WENG TAM, R.P.MARTINS, "A Novel Wiggly-Line Hairpin Filter with 2nd Spurious Passband Suppression", *Proc. IEEE European Microwave Conference – EuMC 2004*, pp. 1125-1128, Amsterdam, Netherlands, October 2004.
84. **PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "A Power-and-Area Efficient, Multifunctional CMOS A/D Interface for a Low-IF/Zero-IF Reconfigurable Receiver", *Proc. IEEE/IEEJapan International Analog VLSI Workshop – AVLSIWS 2004*, pp. 233-238, University Macau, Macao, China, October 2004 ["Best Paper Award"].**
83. PUI-IN MAK, KA-HOU AO IEONG, CHONG-YIN FOK, SENG-PAN U, R.P.MARTINS, "A Complex Low-IF Transceiver Architecture for Relaxing Phase Noise and Settling Time Requirements of RF PLL-FS", *Proc. IEEE/IEEJapan International Analog VLSI Workshop – AVLSIWS 2004*, pp. 221-226, University Macau, Macao, China, October 2004.
82. KA-HOU AO IEONG, CHONG-YIN FOK, SENG-PAN U, R.P.MARTINS, "A Multistandard Transmitter D/A Interface with Embedded Frequency Up-Conversion and Two-Step Channel Selection", *Proc. IEEE/IEEJapan International Analog VLSI Workshop – AVLSIWS 2004*, pp. 215-220, University Macau, Macao, China, October 2004.
81. KAI-YIU CHE, HONG-WENG CHONG, SENG-PAN U, R.P.MARTINS, "A 1-V 5.12-MHz Sampling Rate 13-bit CMOS Sigma-Delta Modulator using Reset-Opamp Technique for Portable Audio Data Acquisition System", *Proc. IEEE/IEEJapan International Analog VLSI Workshop – AVLSIWS 2004*, pp. 186-191, University Macau, Macao, China, October 2004.
80. HONG-WENG CHONG, KAI-YIU CHE, SENG-PAN U, R.P.MARTINS, "A 1-V 2.56-MHz Clock-Rate CMOS Multi-bit Sigma-Delta Modulator with Reset-Opamp Technique and Pseudo Data-Weighted-Averaging for Portable Audio Data Acquisition System", *Proc. IEEE/IEEJapan International Analog VLSI Workshop – AVLSIWS 2004*, pp. 180-185, University Macau, Macao, China, October 2004.
79. SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "Novel Low Jitter Multi-Phase Clock Generation Scheme for Parallel Analog-to-Digital Conversion Systems", *Proc. IEEE/IEEJapan International Analog VLSI Workshop – AVLSIWS 2004*, pp. 172-175, University Macau, Macao, China, October 2004.
78. WENG-IENG MOK, PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "Model, Characterization and Solutions of Unstable Reference Voltage for Very-High-Speed Pipelined A/D Converters", *Proc. IEEE/IEEJapan International Analog VLSI Workshop – AVLSIWS 2004*, pp. 138-143, University Macau, Macao, China, October 2004.
77. HOI-KAI PANG, KAM-WENG TAM, R.P.MARTINS, "A Wide Stopband Tapped Square Split Ring Stepped Impedance Interdigital Bandpass Filter", *Proc. IEEE AP/MTT Postgraduate Conference – AP/MTT PGC 2004*, pp. 52-55, University Macau, Macao, China, September 2004.
76. **WENG-IENG MOK, PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "Modeling of Noise Sources in Reference Voltage Generator for Very-High-Speed Pipelined ADC", *Proc. IEEE International Midwest Symposium on Circuits and Systems – MWSCAS 2004*, Vol.I, pp. I-5-I-8, Hiroshima, Japan, July 2004 ["Second Place / Student Paper Contest"].**
75. CHEONG-NGAI, R.P.MARTINS, "Automatic Synthesis of IIR SC Multistage Decimators", *Proc. IEEE International Midwest Symposium on Circuits and Systems – MWSCAS 2004*, Vol.III, pp.III-287-III-290, Hiroshima, Japan, July 2004.
74. HOI-KAI PANG, KA-MENG HO, KAM-WENG TAM, R.P.MARTINS, "A Compact Microstrip $\lambda/4$ -SIR Interdigital Bandpass Filter with Extended Stopband", *Digest Technical Papers IEEE International Microwave Symp. – IMS 2004*, pp. 1621-1624, Fort Worth, Texas, USA, June 2004.
73. W.W.CHOI, K.W.TAM, R.P.MARTINS, "Microwave Lumped and Transversal Bandpass Filter using Unequal Source Degeneration Inductors for Noise and Selectivity Improvement", *Proc. IEEE Mediterranean Microwave Symp. – MMS 2004*, pp.2B.45.1-2B.45.3, Marseille, France, June 2004.
72. KIN-SANG CHIO, SENG-PAN U, R.P.MARTINS, "A Novel Low-Voltage 2nd Order Sigma-Delta Modulator with Double-Sampling for GSM/DECT/WCDMA", *Proc. IEEE Int. Conf. on Comm., Circuits & Systems – ICCAS 2004*, pp.1146-1150, Chengdu, China, June 2004.
71. PUI-IN MAK, KIN-KWAN MA, WENG-IENG MOK, CHI-SAM SOU, KIT-MAN HO, CHENG-MAN NG, SENG-PAN U, R.P.MARTINS, "An I/O-Multiplexed and OTA-Shared CMOS Pipelined ADC with an A-DQS S/H Front-End for Two-Step-Channel-Select Low-IF Receiver", *Proc. IEEE International Symp on Circuits and Systems – ISCAS 2004*, Vol. I, pp. 1068-1071, Vancouver, Canada, May 2004.
70. SIO-WENG TING, KAM WENG TAM, R.P.MARTINS, "Novel Interdigital Microstrip Bandpass Filter with Improved Spurious Response", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2004*, Vol. I, pp. 984-987, Vancouver, Canada, May 2004.

69. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "A Low-IF/Zero-IF Reconfigurable Receiver with Two-Step Channel Selection Technique for Multi-Standard Applications", *Proc. IEEE Int. Symp. on Circuits and Systems – ISCAS 2004*, Vol. IV, pp. 417-420, Vancouver, Canada, May 2004.
68. SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, "A Generalized Timing-Skew-Free, Multi-Phase Clock Generation Platform for Parallel Sampled-Data Systems", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2004*, Vol. I, pp. 369-372, Vancouver, Canada, May 2004.
67. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "A Front-to-Back-End Modeling of I/Q Mismatch Effects in a Complex-IF Wireless Receiver for Large Image Rejection", *Proc. IEEE International Conference on Electronics, Circuits and Systems – ICECS 2003*, pp. 631-634, Sharjah, United Arab Emirates, December 2003.
66. PUI-IN MAK, CHI SAM SOU, SENG-PAN U, R.P.MARTINS, "A Frequency-Downconversion and Channel Selection Sample-and-Hold Circuit with A-DQS Technique for Complex Low-IF Wireless Receivers", *Proc. IEEE International Conference on Electronics, Circuits and Systems – ICECS 2003*, pp. 479-482, Sharjah, United Arab Emirates, December 2003.
65. **PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "A Programmable Switched-Capacitor A-DQS Frequency Downconverter for Two-Step Channel Selection Wireless Receiver", *Proc. International Conference on ASIC – ASICON 2003*, pp. 573-576, Beijing, China, October 2003 ["Best Student Paper Award"].**
64. CHON-IN LAO, SENG-PAN U, R.P.MARTINS, "Bandpass Sigma-Delta Modulator SIMULINK® Non-Idealities Model with Behavior Simulation", *Proc. International Conference on ASIC – ASICON 2003*, pp. 203-206, Beijing, China, October 2003.
63. PUI-IN MAK, WENG IENG MOK, SENG-PAN U, R.P.MARTINS, "I/Q ImBalance Modeling of Quadrature Wireless Transceiver Analog Front-Ends in SIMULINK®", *Proc. IEEE Vehicular Technology Conf. – VTC 2003*, Orlando, Florida, USA, Vol. 4, pp.2371-2374, October 2003.
62. SENG-PAN U, SAI-WENG SIN, R.P.MARTINS, "Spectra Analysis of Nonuniformly Holding Signals for Time-Interleaved Systems with Timing Mismatches", *Proc. IEEE Instrumentation and Measurement Technology Conf. – IMTC 2003*, Vol. 2, pp. 1298-1301, Colorado, USA, May 2003.
61. SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "Timing-Mismatch Analysis in High-Speed Analog Front-End with Nonuniformly Holding Output", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2003*, Vol. I, pp. 129-132, Bangkok, Thailand, May 2003.
60. CHON IN LAO, HO IENG IEONG, KUAI FOK AU, KUOK HANG MOK, SENG-PAN U, R.P.MARTINS, "A 10.7MHz Bandpass Sigma-Delta Modulator using Double-Delay Single-Opamp SC Resonator with Double-Sampling", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2003*, Vol. I, pp. 1061-1064, Bangkok, Thailand, May 2003.
59. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, "A Novel IF Channel Selection Technique by Analog-Double Quadrature Sampling for Complex Low-IF Receivers", *Proc. IEEE International Conference on Communications Technology – ICCT 2003*, Vol. 2, pp.1238-1241, Beijing, China, April 2003.
58. SAI-WENG SIN, SENG PAN U, R.P.MARTINS, "Quantitative Noise Analysis of Jitter-Induced Nonuniformly Sampled-and-Held Signals", *Proc. IEEE International Conference on Acoustics, Speech & Signal Processing – ICASSP 2003*, Vol. 6, pp. VI_253-VI_256, Hong Kong, China, April 2003.
57. FAN LOU, SENG PAN U, R.P.MARTINS, "N-Path Multirate Sigma-Delta Modulator for High-Frequency Applications", *Proc. IEEE International Conference on Electronics, Circuits and Systems – ICECS 2002*, Vol. I, pp. 315-318, Dubrovnik, Croatia, September 2002.
56. FAN LOU, SENG-PAN U, R.P.MARTINS, "Mismatch-Insensitive N-Path Multirate Sigma-Delta Modulator for High-Frequency Applications", *Proc. IEEE Midwest Symposium on Circuits and Systems – MWSCAS 2002*, Vol.I, pp. I-360-I-363, Tulsa, Oklahoma, USA, August 2002.
55. CHANG K.F., TAM K.W., CHOI W.W., R.P.MARTINS, "Novel Quasi-Elliptic Microstrip Filter Configuration using Hexagonal Loop Resonators", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2002*, Vol. I, pp. 863-866, Scottsdale, Arizona, USA, May 2002.
54. CHIANG K.V., TAM K.W., CHOI W.W., R.P.MARTINS, "Noise Performance of CMOS Transversal Bandpass Filters", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2002*, Vol. III, pp. 871-874, Scottsdale, Arizona, USA, May 2002.
53. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "Design and Analysis of Low Timing-Skew Clock Generation for Time-Interleaved Sampled-Data Systems", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2002*, Vol. IV, pp. 441-444, Scottsdale, Arizona, USA, May 2002.
52. **SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "A 2.5V 57MHz 15-Tap SC Bandpass Interpolating Filter with 320MHz Output Sampling Rate in 0.35µm CMOS", *Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2002*, vol. 45 / No.1, pp.380-381 (& 475) & Visuals Supplement, vol. 45 / No.2, pp.306-307 (& 518-519), San Francisco, USA, February 2002 ["World-Top Conference in Microelectronics"].**
51. K.F.CHANG, K.W.TAM, R.P.MARTINS, "Enhancement of Attenuation Poles at Finite Frequencies in Six-Pole Microstrip Quasi-Elliptic Filter", *Proc. International Conf. on ASIC – ASICON 2001*, pp.236-239, Shanghai, China, October 2001.
50. SENG-PAN U, H.M.CHEONG, I.L.CHAN, K.M.CHAN, U.C.CHAN, M.LIU, R.P.MARTINS, J.E.FRANCA, "An SC CCIR-601 Video Restitution Filter with 13.5Msample/S Input and 108 Msample/S Output", *Proc. International Conf. on ASIC – ASICON 2001*, pp.374-377, Shanghai, China, October 2001.
49. S.S.WENG, L.K.CHONG, C.K.VAI, C.W.WA, K.W.TAM, R.P.MARTINS, "An Analytical Linearization Method for CMOS MMIC Power Amplifier using Multiple Gated Transistors", *Proc. International Conf. on ASIC – ASICON 2001*, pp.670-672, Shanghai, China, October 2001.

48. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "High-Frequency Low-Power Multirate SC Realizations for NTSC/PAL Digital Video Filtering", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2001*, Vol. I, pp.204-207, Sydney, Australia, May 2001.
47. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "A High-Speed Frequency Up-Translated SC Bandpass Filter with Auto-Zeroing for DDFS Systems", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2001*, Vol. I, pp.320-323, Sydney, Australia, May 2001.
46. K.H.CHIANG, K.V.CHIANG, K.F.LAM, W.W.CHOI, K.W.TAM, R.P.MARTINS, et al., "A Modular Approach for High-Q Microwave CMOS Active Inductor Design", *Proc. IEEE International Conference on Electronics, Circuits and Systems – ICECS 2000*, Kaslik, Lebanon, Vol. I, pp. 41-44, December 2000.
45. K.H.CHIANG, K.V.CHIANG, K.F.LAM, W.W.CHOI, K.W.TAM, R.P.MARTINS, "Comparative Study of Microwave CMOS Differential Active Inductor", *Proc. First Portugal-China Workshop on Solid-State Circuits – PCWSSC 2000*, pp. 96-97, Shanghai, China, October 2000.
44. T.S.WENG, W.W.CHOI, W.C.LEUNG, M.C.KUAN, R.P.MARTINS, "Adaptive Infrared Sensing for P.O.Box Status Detection", *Proc. First Portugal-China Workshop on Solid-State Circuits – PCWSSC 2000*, pp. 71-72, Shanghai, China, October 2000.
43. K.W.TAM, P.VITOR, J.C.FREIRE, R.P.MARTINS, "Formulation of Microwave Lumped and Tuned Transversal Filter", *Proc. First Portugal-China Workshop on Solid-State Circuits – PCWSSC 2000*, pp. 41-42, Shanghai, China, October 2000.
42. CHEONG NGAI, R.P.MARTINS, "Design Considerations of SC Analogue Multirate Filters with Multistage Implementation", *Proc. First Portugal-China Workshop on Solid-State Circuits – PCWSSC 2000*, pp. 34-35, Shanghai, China, October 2000.
41. CHEONG NGAI, R.P.MARTINS, "Selection Topology of IIR Multirate SC Decimating Filters with Statistical Model", *Proc. First Portugal-China Workshop on Solid-State Circuits – PCWSSC 2000*, pp. 30-31, Shanghai, China, October 2000.
40. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "Experimental Results of SC Fractional Multirate Converters with Intermittent Polyphase Structures", *Proc. First Portugal-China Workshop on Solid-State Circuits – PCWSSC 2000*, pp. 28-29, Shanghai, China, October 2000.
39. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "A Linear-Phase Half-Band SC Video Interpolation Filter with Coefficient-Sharing and Spread Reduction", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2000*, Vol. III, pp. 177-180, Geneva, Switzerland, May 2000.
38. CHEONG NGAI, R.P.MARTINS, "Interactive SC Multirate Compiler Applied to Multistage Decimator Design", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 2000*, Vol. III, pp. 185-188, Geneva, Switzerland, May 2000.
37. WAI-WA CHOI, K.W.TAM, P.VITOR, R.P.MARTINS, "Active Feedback Amplifier Approach for Microwave Filter", *Proc. IEEE International Conference on Electronics, Circuits and Systems – ICECS 1999*, pp. 497-500, Cyprus, September 1999.
36. CHEONG NGAI, R.P.MARTINS, "Synthesis and Design of a 7th Order SC Lowpass Decimator combining Externally Cascaded and Ladder Structures", *Proc. IEEE Workshop on Signal Processing Systems – SPS 1999*, pp.681-685, Taipei, Taiwan, September 1999.
35. SENG-PAN U, R.NEVES, R.P.MARTINS, J.E.FRANCA, "A 120 MHz SC 4th Order Elliptic Interpolation Circuit with Gain and Offset Compensation for Direct Digital Frequency Synthesizer", *Proc. IEEE Asia-Pacific Conference on ASICs – AP-ASIC 1999*, pp.1-4, Seoul, South Korea, August 1999.
34. CHEONG NGAI, R.P.MARTINS, "Synthesis and design of a 6th Order SC Lowpass Decimator combining externally and internally Cascaded Structures", *Proc. IEEE Asia-Pacific Conference on ASICs – AP-ASIC 1999*, pp.9-12, Seoul, South Korea, August 1999.
33. R.P.MARTINS, "University of Macau – A Bridge between portuguese and chinese universities", *Proc. of I Congress Portugal-China*, ISBN: 972-669-602-X, pp.186-201, Universidade de Trás-os-Montes e Alto Douro, Portugal, May 1999.
32. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "Highly Accurate Mismatch-Free SC Delay Circuits with Reduced Finite Gain and Offset Sensitivity", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 1999*, Vol. II, pp. 57-60, Orlando, USA, May 1999.
31. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "High Performance Multirate SC Circuits with Predictive Correlated Double Sampling Technique", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 1999*, Vol. II, pp. 77-80, Orlando, USA, May 1999.
30. KAM-WENG TAM, P.VITOR, J.C.FREIRE, R.P.MARTINS, "New Microwave Bandstop Filter using Lumped and Transversal Network", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 1999*, Vol. VI, pp. 30-32, Orlando, USA, May 1999.
29. K.W.TAM, J.VINAGRE, B.GOMES, J.C.FREIRE, P.VITOR, R.P.MARTINS, "Modified RF Lumped and Transversal Filter", nas *Actas da II Conferência de Telecomunicações*, pp.507-509, Sesimbra, Portugal, April 1999.
28. CHEONG NGAI, R.P.MARTINS, "Automated Design of SC Multistage Sampling Rate Converters using Linear / Non-Linear Programming", *Proc. IEEE International Conference on ASIC – ASICON 1998*, pp. 342-345, Beijing, China, October 1998.
27. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "A Novel Half-Band SC Architecture for Efficient Analog Impulse Sampled Interpolation", *Proc. IEEE International Conference on Electronics, Circuits and Systems – ICECS 1998*, pp. 389-393, Lisbon, Portugal, September 1998.
26. CHOU HEI WO, ORLANDO, J.E.FRANCA, J.C.VITAL, C.A.LEME, R.P.MARTINS, "A 21.4 MHz Gm-C Bandpass Filter in 0.8 μ m Digital CMOS With On-chip Frequency and Q-factor tuning", *Proc. IEEE-CAS / Region 8 – 2nd Workshop on Analog and Mixed IC Design 1997*, pp.87-90, Baveno, Italy, September 1997.

25. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "Impulse Sampled Intermittent SC FIR Rational Decimators with Double-Sampling", *Proc. IEEE Midwest Symposium on Circuits and Systems – MWSCAS 1997*, pp. 977-980, Sacramento, USA, August **1997**.
24. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "Intermittent Polyphase SC Structures For FIR Rational Interpolation", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 1997*, Vol. I, pp. 121-124, Hong Kong, June **1997**.
23. KAM-WENG TAM, P.VITOR, R.P.MARTINS, "MMIC Active Filter with Tuned Transversal Element", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 1997*, Vol. I, pp. 305-308, Hong Kong, June **1997**.
22. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "New Impulse Sampled IIR Switched-Capacitor Interpolators", *Proc. IEEE International Conference on Electronics, Circuits and Systems – ICECS 1996*, pp. 203-206, Rodos, Greece, October **1996**.
21. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, "Switched-Capacitor Finite Impulse Response Interpolators Without the Input Sample-and-Hold Filtering Effect", *Proc. IEEE Midwest Symposium on Circuits and Systems – MWSCAS 1996*, pp. 145-148, Ames, USA, August **1996**.
20. R.P.MARTINS, PONG CHI WAI, SENG-PAN U, et al., "UMCHIP - First Integrated Circuit designed in Macau (Multifunctional & Mixed A/D - 1.2 μ m CMOS)", *Proc. Int. Conf. on Education, Practice & Promotion of Computational Methods in Engineering using Small Computers - EPMESC-V*, pp.1583-1589, Macao, August **1995**.
19. R.P.MARTINS, "Faculdade de Ciências e Tecnologia", *Proc. International Seminar: Higher-Education in Macao*, pp.27-34, University of Macau, Macao, January **1995**.
18. R.P.MARTINS, "Research & Development in Engineering in Macao: What Future?", *Proc. Symposium on Population and Development in Macao*, pp. 335-344, University of Macau & Macau Foundation, Macao, December **1993**.
17. R.P.MARTINS, J.E.FRANCA, F.MALOBERTI, "An Experimental 1.8 μ m CMOS Anti-Aliasing SC Decimator with High Input Sampling Frequency", *Proc. IEEE European Solid-State Circuits Conference – ESSCIRC 1991*, pp.13-16, Milan, Italy, September **1991**.
16. R.P.MARTINS, J.E.FRANCA, "Sensitivity Aspects Related to the Switch Timing of Multirate Switched-Capacitor Circuits", *Proc. IEEE International Conference on Circuits and Systems – ICCAS 1991*, pp.220-223, Shenzhen, China, June **1991**.
15. J.E.FRANCA, R.P.MARTINS, "Novel Solutions for Anti-Aliasing and Anti-Imaging Filtering in CMOS Video Interface Systems", *Proc. Workshop on Visual Signal Processing and Communications*, pp.202-205, Taipei, Taiwan, June **1991**.
14. R.P.MARTINS, J.P.VITAL, P.MARTINS, J.GUILHERME, C.NETA, E.ALVERCA J.E.FRANCA, "A 3 μ m CMOS Analogue-Digital Integrated Circuit for Portable Radiotelephones", *Proc. MidEuropean Conference on Custom Circuits and Applications*, pp. 101-109, Sopron, Hungary, April **1991**.
13. R.P.MARTINS, J.E.FRANCA, "Infinite Impulse Response of Switched-Capacitor Interpolators with Optimum Implementation", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 1990*, pp.2193-2197, New Orleans, USA, May **1990**.
12. R.P.MARTINS, J.E.FRANCA, "A 2.4 μ m CMOS SC Video Decimator with Sampling Rate Reduction from 40.5MHz to 13.5MHz", *Proc. Custom Integrated Circuits Conference – CICC 1989*, pp. 25.4.1-25.4.4, San Diego, California, USA, May **1989**.
11. R.P.MARTINS, J.E.FRANCA, "A Novel N-th Order Switched-Capacitor Decimator Building Block with Optimum Implementation", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 1989*, pp. 1471-1474, Portland, Oregon, USA, May **1989**.
10. R.P.MARTINS, J.E.FRANCA, "Architecture Compilation of Multistage IIR Switched-Capacitor Decimators", *Proceedings V Jornadas de Diseño de Circuitos Integrados*, pp.31-39, Huelva, Spain, December **1989**.
9. R.P.MARTINS, J.E.FRANCA, "Optimum Implementation of a Multistage IIR SC Bandpass Decimator for a Voiceband Analogue Interface System", *Proc. IEEE International Symposium on Circuits and Systems – ISCAS 1988*, pp. 1661-1664, Helsinki, Finland, June **1988**.
8. R.P.MARTINS, J.E.FRANCA, C.A.LEME, J.P.VITAL, F.MALOBERTI, "Componentes para Circuitos Integrados CMOS com Condensadores Comutados", in *Proceedings of the 3rd Symposium on Telecommunications and Electronics*, pp. C.9-1-C.9-6, Porto, May **1988**.
7. R.P.MARTINS, J.E.FRANCA, F.MALOBERTI, "Design and Implementation of a CMOS Integrated Circuit SC Decimator for High-Frequency Applications", in *Proceedings of the 3rd Symposium on Telecommunications and Electronics*, pp.C.9-12-C.9-16, Porto, May **1988**.
6. M.S.PIEDADE, J.B.GERALD, M.M.SILVA, R.P.MARTINS, "Arquitetura e Circuitos de Processamento de Sinal para um Modem PSK (1200 b.p.s.)", in *Proceedings of the 2nd Symposium on Telecommunications and Electronics*, pp.256-259, Lisboa, May **1986**.
5. M.S.PIEDADE, N.A.CARVALHO, R.P.MARTINS, J.M.MARTINS, O.L.BERNARDA, M.M.SILVA, M.S.COSTA, "Sistema de Controlo para um Modem PSK (1200 b.p.s.)", in *Proceedings of the 2nd Symposium on Telecommunications and Electronics*, pp.260-264, Lisboa, May **1986**.
4. L.S.VIDIGAL, J.C.DELGADO, R.P.MARTINS, et. al., "Circuito Integrado para Controlo de Sistema de Telefone Inteligente", in *Proceedings of the 1st Symposium on Telecommunications and Electronics*, pp.37-40, Lisbon, May **1984**.
3. J.C.DELGADO, R.P.MARTINS, "Projecto e Implementação de uma Interface para Teclado em VLSI", in *Proceedings of the 1st National Workshop about Telecommunications and Computer Engineering*, pp.C.10-C.15, Sesimbra, November **1983**.
2. M.S.PIEDADE, R.P.MARTINS, J.C.FREIRE, L.S.VIDIGAL, "Filtro Integrado Monolítico com Tecnologia NMOS", in *Technical Sessions of ENDIEL 83*, Lisbon, January **1983**.
1. R.P.MARTINS, M.S.PIEDADE, M.M.SILVA, "Realização de Filtros para Modem FSK-300 baud", in *Technical Sessions of ENDIEL 83*, Lisbon, January **1983**.

Others (66)

Theses [2]

2. R.P.MARTINS, *Circuitos Multirritmo com Condensadores Comutados e suas Aplicações em Alta Frequência*, **Ph.D. Thesis**, Instituto Superior Técnico - **TU of Lisbon**, Portugal, October **1991**.
1. R.P.MARTINS, *Amplificadores Operacionais MOS para Filtros com Condensadores Comutados*, **Master Thesis**, Instituto Superior Técnico - **TU of Lisbon**, Portugal, January **1985**.

Proceedings of the Academy of Sciences of Lisbon [1]

1. R.P.MARTINS, *Duas Décadas de Microelectrónica em Macau: De um Deserto a um Laboratório de Referência do Estado Chinês*, *Comunicação à Academia das Ciências de Lisboa*, **Actas da Academia das Ciências de Lisboa, Memórias XLVII**, Vol. I, pp.7-62, Lisboa, Portugal, Fevereiro **2012**, online **2020**.

Technical reports [19]

Internal Reports from the University of Macau, Macao, China

19. R.P.MARTINS, PUI-IN MAK, SAI-WENG SIN, "Research Report 2011-2016", *State Key Laboratory of Analog and Mixed-Signal VLSI, University of Macau*, Macao, China, January **2017**.
18. PAULINO FORTES, PUI-IN MAK, R.P.MARTINS, "Linear Fluidic Active Micromixer with Enhanced Mixing Speed: Mathematical Modeling and Computer Simulations", *Post-Doc Report of the State Key Laboratory of Analog and Mixed-Signal VLSI, University of Macau*, Macao, China, March **2016**.
17. R.P.MARTINS, "From the Desert into the Sea - A Success Story of a Decade in Macao Microelectronics Education, Science and Industry", January **2005**.
16. R.P.MARTINS, et al., "Teaching Quality at University of Macau", *presented to the University Senate with the results of the Teaching Quality / AD-Hoc Working Group*, July **2002** [**Principal author and group leader**].
15. S.LAI, R.P.MARTINS, "WEB-CT Pilot Project on Online Education", *presented to the University Senate Pedagogic Committee with a plan for online education development in the University of Macau*, October **2000** [**Principal author and group leader**].
14. R.P.MARTINS, et al. "Self-Evaluation Report / University of Macau" (4 volumes with close to 2000 pages), *submitted to the Council of Rectors of Portuguese Universities - CRUP and to the National Committee for the Evaluation of Portuguese Universities*, March **1999** [**Principal author and group leader as Vice-Rector of the University**].
13. R.P.MARTINS, IU VAI PAN, JUN CHEN, "Academic Report / Faculty of Science and Technology" (1 volume with close to 500 pages), *presented to the Council of Rectors of Portuguese Universities - CRUP and the Ministry of Education, in Portugal for official recognition of the engineering degrees - Bachelor*, June **1995** [**Principal author as Dean of the Faculty**].
12. R.P.MARTINS, "Faculty of Science and Technology - First Impressions and First Proposals", *first report written after the arrival to University of Macau containing the proposals for the creation of postgraduate programs in engineering at Master and Ph.D. levels*, December **1992**.

Internal Reports from the Inesc-Macau, Macao, China

11. W.FAI, L.C.SAN, D.M.CHUI, H.Y.DUO, R.P.MARTINS, "Portuguese-Chinese Bi-directional and Automatic Translation System - PCT", *Report describing the first project of bi-directional automatic machine translation from Portuguese to Chinese and vice-versa - Unique in the world and already used in Macao, China, Angola, Mozambique, Brazil and Portugal*, *Internal Report of INESC-Macau*, Macao, China, December **1999** [**Project-coordinator while President of the Institute for Systems Engineering and Computers / INESC-Macau**].
10. T.S.WENG, L.C.SAN, H.Y.DUO, R.P.MARTINS, "P.O.Box Automation Project for the Macao Post-Office", *Internal Report of INESC-Macau*, Macao, China, October **1998** [**Project-coordinator while President of the Institute for Systems Engineering and Computers / INESC-Macau**].
9. R.P.MARTINS, Z.L.GAO, "Home Health Care Project in Macau", *Project addressed to monitor from the hospital 10 cardiac-patients remotely at home - This project saved one human life*, *Internal Report of University of Macau & INESC-Macau*, Macao, China, July **1996** [**Project-coordinator while Dean of the Faculty of Science and Technology, University of Macau & also BOD Member of INESC-Macau**].

Internal Reports from the Technical University of Lisbon, Portugal

(*For R&D projects at National and European level between university and companies*)

8. R.P.MARTINS, J.E.FRANCA, "ESPRIT II - 5056, AD2000", *3rd Technical Progress Report - European Union Research Project* (Period 15/10/91 to 15/4/92), IST / Technical University of Lisbon, Portugal, May **1992** [**Acting-Coordinator of the research group**].
7. R.P.MARTINS, J.E.FRANCA, "INTERFACE" - PMCT/TIT/433/90", *1st Technical Progress Report - Portuguese Science & Technology Foundation Project* (Annual Report 1991) IST / Technical University of Lisbon, Portugal, January **1992** [**Acting-Coordinator of the research group**].

6. R.P.MARTINS, "Multistage Switched-Capacitor Bandpass Decimator for a Voiceband Analogue Interface System", *Internal Report to British Telecom*, under research contract number 598589, Center of Applied Electronics / Technical University of Lisbon, June **1987** [**Principal investigator**].
5. J.E.FRANCA, C.A.LEME, R.P.MARTINS, "An LSI Analogue Front-End for a V.32 Modem", *Internal Report to British Telecom*, under research contract number 598589, Center of Applied Electronics / Technical University of Lisbon, December **1986** [**Member of the research group**].
4. R.P.MARTINS, J.M.MARTINS, N.CARVALHO, O.BERNARDA, M.S.PIEDADE, "Control System for a PSK Modem (1200 bps)", *Internal Report to Standard Eléctrica/ Alcatel Thompson*, under research contract, Center of Applied Electronics / Technical University of Lisbon, May **1986** [**Member of the research group and principal author of the technical report**].
3. R.P.MARTINS, "CODEC CVSD - Continuous Variable Slope Delta Modulator", *Internal Report of the Center of Applied Electronics / Technical University of Lisbon*, Portugal, September **1984** [**Principal investigator**].
2. R.P.MARTINS, "Monolithic Integrated Filter with Switched-Capacitors (NMOS Technology)", *Internal Report of the Center of Applied Electronics / Technical University of Lisbon*, Portugal, January **1983** [**Principal investigator**].
1. R.P.MARTINS, "Switching and Control Unit for a FSK Duplex-Modem (300 bps)", *Internal Report to Centre/Research and Development Company*, under research contract, Center of Applied Electronics / Technical University of Lisbon, Portugal, January **1983** [**Principal investigator**].

Books (co-editor) [16]

16. C.M.SARMENTO, P.GUIMARÃES, R.P.MARTINS, *Confluências de Culturas no Mundo Lusófono / Proceedings of the 27th Meeting of the Association of Portuguese Speaking Universities - AULP - Campinas, Brasil 2017*, AULP Edition, ISBN: 978-989-8271-15-0, July **2017**.
15. C.M.SARMENTO, P.GUIMARÃES, S. MOURA, R.P.MARTINS, "30 Anos a construir Redes de Ensino Superior em Português" - *Revista Internacional em Língua Portuguesa - RILP*, AULP Edition, III Série, No.30, ISSN: 2182-4452, December **2016**.
14. C.M.SARMENTO, P.GUIMARÃES, V. PAULINO, R.P.MARTINS, *Rotas de Signos: Mobilidade Académica e Globalização no Espaço da CPLP e Macau / Proceedings of the 26th Meeting of the Association of Portuguese Speaking Universities - AULP - Díli, Timor-Leste 2016*, AULP Edition, ISBN: 978-989-8271-14-3, June/July **2016**.
13. F.A. DE FIGUEIREDO, C.M.SARMENTO, P.GUIMARÃES, R.P.MARTINS, *Timor-Leste: Identidade e Território*, Edição Comemorativa do XXVI Encontro da AULP, *Díli, Timor-Leste*, AULP Edition, July **2016**.
12. C.M.SARMENTO, R.P.MARTINS, *Virtudes de algumas plantas, folhas, frutas, cascas e raízes de diferentes árvores e arbustos da Ilha de Timor*, *Lisboa, Portugal*, AULP Edition, ISBN: 978-989-8271-11-2, July **2016**.
11. TING TING HWANG, DAVID Z.PAN, PUI-IN MAK, R.P.MARTINS, *Proceedings of the 21st IEEE Asia & South Pacific Design Automation Conference - ASPDAC 2016*, ACM SIGDA, IEEE CEDA, IEEE CASS & IEEE Macau Joint-Chapter on CAS/COM Joint-Edition [*in IEEE Xplore*], Macao, China, January **2016**.
10. C.M.SARMENTO, P.GUIMARÃES, R.P.MARTINS, *Novos Desafios para o Ensino Superior após os Objectivos de Desenvolvimento do Milénio (ODM) / Proceedings of the 25th Meeting of the Association of Portuguese Speaking Universities - AULP - Santiago, Cidade Velha, Praia, Cabo Verde 2015*, AULP Edition, ISBN: 978-989-8271-10-5, December **2015**.
9. C.M.SARMENTO, S. MOURA, P.GUIMARÃES, R.P.MARTINS, *Mar*, *Revista Internacional em Língua Portuguesa (RILP)*, III Série, No.27, AULP Edition, ISSN: 1518-8434, December **2014**.
8. C.M.SARMENTO, S.MOURA, R.P.MARTINS, *A Importância da Difusão das Línguas Portuguesa e Chinesa para a Colaboração Académica no Ensino Superior e Promoção do Turismo / Proceedings of the 24th Meeting of the Association of Portuguese Speaking Universities - AULP - Macau 2014*, AULP Edition, ISBN: 978-9898271-08-2, June **2015**.
7. C.M.SARMENTO, M.A.ESPADINHA, R.P.MARTINS, *A China, Macau e os Países de Língua Portuguesa / Proceedings of the 20th Meeting of the Association of Portuguese Speaking Universities - AULP - Macau 2010*, AULP Edition, ISBN:978-989-8271-03-7, February **2011**.
6. M.A.ESPADINHA, L.SEABRA, A.R.BAPTISTA, R.P.MARTINS, *Dicionário Temático da História de Macau - DITEMA*, [4 Volumes / 1,600 Pages], ISBN: 979-99937-1-009-6, Macao, China, September **2010**.
5. SENG-PAN U, GANG WEI, HOWARD C. LUONG, F.MALOBERTI, R.P.MARTINS, *Proceedings of the 9th IEEE Asia-Pacific Conference on Circuits And Systems - APCCAS 2008*, IEEE CASS & IEEE Macau Joint-Chapter on CAS/COM Joint-Edition, ISBN: 978-1-4244-2342-2 [*in IEEE Xplore*], Macao, China, December **2008**.
4. C.M.SARMENTO, M.A.ESPADINHA, R.P.MARTINS, *Organização do Espaço de Ensino Superior e Investigação dos Países de Língua Portuguesa / Proceedings of the 16th Meeting of the Association of Portuguese Speaking Universities - AULP - Macau 2006*, AULP Edition, ISBN: 978-989-95425-5-6, February **2008**.
3. WONG-MAN CHUNG, VAI MANG I, R.P.MARTINS, *Proceedings of the 4th Regional Inter-University Postgraduate Electrical and Electronics Engineering Conference - RIUPEEEC 2006*, IEEE HK, Beijing, Taiwan & Macau Sections Joint-Edition, University of Macau, Macao, China, July **2006**.

2. M.A.ESPADINHA, G.FEIO, R.P.MARTINS, *O Espaço Lusófono do Ensino Superior e Investigação / Proceedings of the 13th Meeting of the Association of Portuguese Speaking Universities - AULP - Macau 2003*, AULP Edition, ISBN: 99937-26-81-8, Publications Centre, University of Macau, Macao, China, June **2006**.
1. SENG-PAN U, KAZUYUKI WADA, NOBUO FUJII, R.P.MARTINS, *Proceedings of the 7th 2004 IEEE International Analog VLSI Workshop - AVLSIWS 2004*, Institute of Electrical Engineers Japan and IEEE Macau Section Joint-Edition, University of Macau, Macao, China, October **2004**.

Scientific Publications (Internal) [4]

4. R.P.MARTINS, "Advanced CMOS Operational Amplifiers for High-Frequency and Low-Power (Low-Voltage) Filters in Analog/Digital Interfaces", *Synthesis Lesson presented in the Habilitation Exam to Full-Professor*, Instituto Superior Técnico, Technical University of Lisbon, Portugal, November 27, **2001**.
3. R.P.MARTINS, "Presentation to the Application for Full Professor - Report of Activities for the Period 16/10/92-16/2/98", *Open Exam for Full-Professor*, University of Macau, Macao, February 17, **1998**.
2. R.P.MARTINS, "Filter Sensitivity", *Synthesis Lesson (Pedagogic) presented in the Exam for the promotion to Lecturer*, Instituto Superior Técnico, Technical University of Lisbon, Portugal, February **1983**.
1. R.P.MARTINS, "Filters for FSK-Duplex Modem", *Synthesis Report (Scientific) presented in the Exam for the promotion to Lecturer*, Instituto Superior Técnico, Technical University of Lisbon, Portugal, February **1983**.

Pedagogic Publications [8]

8. R.P.MARTINS, "Information Technology Revolution and Electronics", *Course .ppt Slides of the First 5 Classes (Bachelor in Electrical and Computer Engineering)*, Faculty of Science and Technology, University of Macau, Macao, China, academic year **2011/2012 & 2012/2013**.
7. SENG-PAN U, R.P.MARTINS, "Circuit Analysis", *Course Transparencies (Bachelor in Electrical and Electronics Engineering)*, Faculty of Science and Technology, University of Macau, Macao, China, academic years **1999/2000 to 2004/2005**.
6. R.P.MARTINS, "Digital Signal Processing", *Course Transparencies (Bachelor in Electrical and Electronics Engineering)*, Faculty of Science and Technology, University of Macau, Macao, China, academic year **1999/2000**.
5. SENG-PAN U, R.P.MARTINS, "Signals & Systems", *Course Transparencies (Bachelor in Electrical and Electronics Engineering)*, Faculty of Science and Technology, University of Macau, Macao, China, academic years **1998/1999 to 2007/2008**.
4. R.P.MARTINS, "Microelectronics for Telecommunications and Signal Processing", *Course Transparencies and .ppt slides (Master in Electrical and Electronics Engineering)*, Faculty of Science and Technology, University of Macau, Macao, China, academic years **1994/1995 to 2007/2008**.
3. R.P.MARTINS, "Microelectronic Circuit Design", *Course Transparencies and .ppt slides (Master in Electrical and Electronics Engineering)*, Faculty of Science and Technology, University of Macau, Macao, China, academic years **1993/1994 to 2007/2008**.
2. R.P.MARTINS, "Project of a CMOS Operational Amplifier", *Electronics II for Telecommunications, Course Project Exercise for the Bachelor in Electrical Engineering*, Electronics Section / Electrical Engineering and Computers Department, IST/TUL, Portugal, academic year **1991/1992**.
1. J.AUGUSTO, R.P.MARTINS, M.S.PIEDADE, "Application Exercises", *Electronics IV, Course Collection of Problems for the Bachelor in Electrical Engineering*, Electronics Section / Electrical Engineering and Computers Department, IST/TUL, Portugal, academic year **1990/1991**.

Other Conferences [9]

9. R.P.MARTINS, "University of Macau - Teaching, Research and Management with International Standards" (Portuguese version), in the *Proceedings of the 13th Meeting of the Association of Portuguese Speaking Universities - AULP*, ISBN 99937-26-81-8, pp. 35-48, University of Macau, **Macao, China**, October **2003**.
8. R.P.MARTINS, "Cooperation Mozambique/China through Macau and its University" (Portuguese version), in *Proceedings of the 9th Meeting of the Association of Portuguese Speaking Universities - AULP*, ISBN 972-8359-34-9, pp.15-31, **Maputo, Mozambique**, April **1999**.
7. C.C.CHEUNG, R.P.MARTINS, "Online Education in the University of Macau", in the *Proceedings of the Macao IT Congress 99*, pp.119-123, **Macao**, March **1999**.
6. L.W.TIM, R.P.MARTINS, "CMOS Programmable Multiphase and Multifunction Clock Generator for Multirate Analogue Interface", in the *Proceedings of Symposium on Science & Technology and the Development of Macau - Macau Science and Technology Week*, pp.226-231, **Macao**, December **1998**.
5. R.P.MARTINS, "University Development facing Globalization - Teaching and R&D in the Age of Information Technology" (Portuguese version), in *Proceedings of the 8th Meeting of the Association of Portuguese Speaking Universities - AULP*, ISBN 972-8359-29-9, pp.39-61, University of Macau, **Macao**, April **1998**.
4. R.P.MARTINS, "Technological Bridge between Portugal / Brazil and China through a Microcosmos - Macau" (Portuguese version), in the *Proceedings of the 7th Meeting of the Association of Portuguese Speaking Universities - AULP*, ISBN 972-8359-25-X, pp.65-90, **Rio de Janeiro, Brazil**, April **1997**.

3. R.P.MARTINS, "The University of Macau / Faculty of Science and Technology" (Portuguese version), in the *Proceedings of the International Seminar: Higher-Education in Macao*, ISBN: 972-96791-0-X, pp.27-34, University of Macau, **Macao**, January **1995**.
2. R.P.MARTINS, "Research & Development – R&D Projects in Macao", in *Proceedings of the International Information Technology Seminar, United Nations University / International Institute for Software Technology*, UNU/IIST, **Macao**, September **1994**.
1. R.P.MARTINS, "Research & Development in Engineering in Macao: What Future?", in *Proceedings of the Symposium on Population and Development in Macao*, ISBN: 972-96005-4-6, pp. 335-344, FSH/University of Macau, **Macao**, December **1993**.

Local Magazine [1]

1. R.P.MARTINS, "Two Decades in Macao Microelectronics – Education, Industry, Scientific Research", Guest Editorial, in *Macao ICT Magazine*, Vol. 7, pp. 6-7, May **2011**.

Honoris Causa Citations [6]

6. R.P.MARTINS, "Professor Sérgio Machado dos Santos" (former President of Council of Rectors of Portuguese Universities and Honorary Rector of University of Minho), *Citation* in the Award of the "Doctor of Science - Honoris Causa" by University Macau, **Macao, China**, December 7th **2013**.
5. R.P.MARTINS, "Professor Francisco José Ayala Pereda" (2001 National Medal of Science, USA & 2010 Templeton Prize, UK), *Citation* in the Award of the "Doctor Science - Honoris Causa" by University Macau, **Macao, China**, November 4th **2011**.
4. R.P.MARTINS, "Professor José de Albuquerque Epifânio da Franca" (IEEE Fellow & CEO of Chipidea Microelectronics – Lisbon, Poland, USA, Macao and China), *Citation* in the Award of the "Doctor Science - Honoris Causa" by University Macau, **Macao, China**, November 4th **2006**.
3. R.P.MARTINS, "Professor Chung Laung Liu" (born in Macao, IEEE & ACM Fellow, Former President of National Tsinghua University, Hsinchu, Taiwan), *Citation* in the Award of the "Doctor of Science - Honoris Causa" by University Macau, **Macao, China**, December 3rd **2004**.
2. R.P.MARTINS, "Professor Eduardo Arantes e Oliveira" (former President Civil Engineering Laboratory and Rector of the Technical University of Lisbon, also Full-Professor of IST), *Citation* in the Award of the "Doctor of Science - Honoris Causa" by the University of Macau, ISBN 972-97865-6-9, pp.49-56, **Macao**, December 3rd **1998**.
1. R.P.MARTINS, "Doutor Joaquim Chissano" (President of the Republic of Mozambique), *Citation* in the Award of the "Doctorate Honoris Causa" by the University of Macau, ISBN 972-8359-28-4, pp.19-24, **Macao**, April 3rd **1998**.