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## Onderzoeksoutput

### **A 60 GHz low noise variable gain amplifier with small noise figure and IIP3 variation in a 40-nm CMOS technology**

Wang, B., Gao, H., van Dommele, R., Matters-Kammerer, M. K. & Baltus, P. G. M. 29 jun 2018 *2018 IEEE MTT-S International Wireless Symposium, IWS 2018 - Proceedings*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), 4 blz. 8400880

### **Characterization of damper-to-damper wireless channel in small cars**

Costa, C. A. M., Dheans, M., Baltus, P. & Gao, H. 29 jun 2018 *2018 IEEE MTT-S International Wireless Symposium, IWS 2018 - Proceedings*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), 3 blz. 8401014

### **Immunity analysis of an LDO using identification of operating region transitions**

Duipmans, L., Milosevic, D., Van Der Wel, A., Karadi, R. & Baltus, P. 22 jun 2018 *2018 IEEE International Symposium on Electromagnetic Compatibility and 2018 IEEE Asia-Pacific Symposium on Electromagnetic Compatibility, EMC/APEMC 2018*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 701-706 6 blz.

### **An UWB, low-noise, low-power quadrature VCO using delay-locked loop in 40-nm CMOS for image-rejection receivers**

Kaul, P., Gao, H., He, X. & Baltus, P. G. M. 4 mei 2018 *2018 IEEE International Symposium on Circuits and Systems, ISCAS*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), 5 blz.

### **A wideband envelope detector with low ripple and high detection speed**

Ying, K., Gao, H., Min, X., Milosevic, D. & Baltus, P. 1 mei 2018 *2018 IEEE International Symposium on Circuits and Systems (ISCAS)*. Institute of Electrical and Electronics Engineers (IEEE), blz. 1-5 5 blz.

### **Analysis of the effect of PFD sampling on charge-pump PLL stability**

Dhar, D., van Zeijl, P. T. M., Milosevic, D., Gao, H. & Baltus, P. G. M. 1 mei 2018 *2018 IEEE International Symposium on Circuits and Systems (ISCAS)*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-5 5 blz.

### **A 174 pW–488.3 nW 1 S/s–100 kS/s all-dynamic resistive temperature sensor with speed/resolution/resistance adaptability**

Xin, H., Andraud, M. N., Baltus, P. G. M., Cantatore, E. & Harpe, P. J. A. 17 apr 2018 In : *IEEE Solid-State Circuits Letters*. 1, 3, blz. 70-73 4 blz.

### **Damper-to-damper path loss characterization for intra-vehicular wireless sensor networks**

Costa, C. A. M., Gao, H., Le Polain, T., van Dommele, R., Smolders, B., Dheans, M. & Baltus, P. 5 jan 2018 *2017 European Radar Conference (EURAD) : "A Prime Year for a Prime Event", EuMW 2017 - Conference Proceedings; 14th European Microwave Conference, EURAD 2017*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 493-496 4 blz.

### **A 60 GHz low power self-mixing receiver in 65-nm CMOS for a radio-triggered battery-less monolithic wireless sensor**

Gao, H., Matters-Kammerer, M. & Baltus, P. G. M. jan 2018 In : *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*. 8, 2, blz. 240-250 11 blz., 08278164

### **A 1.9 mW 250 MHz bandwidth continuous-time $\Sigma\Delta$ modulator for ultra-wideband applications**

Neofytou, M., Zhou, M., Bolatkale, M., Liu, Q., Zhang, C., Radulov, G. I., Baltus, P. G. M. & Breems, L. J. 2018 *2018 IEEE International Symposium on Circuits and Systems (ISCAS)*. PiscataWAY: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-5 5 blz.

#### **A 2 GHz 0.98 mW 4-bit SAR-based quantizer with ELD compensation in an UWB CT $\Sigma\Delta$ modulator**

Zhou, M., Neofytou, M., Liu, Q., Bolatkale, M., Zhang, C., Cenci, P., Radulov, G. I., Baltus, P. G. M. & Breems, L. J. 2018 *2018 IEEE International Symposium on Circuits and Systems (ISCAS)*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), 5 blz.

#### **Batteryless mm-wave wireless sensors**

Gao, H., Matters - Kammerer, M., Milosevic, D. & Baltus, P. G. M. 2018 Springer. (Batteryless mm-Wave Wireless Sensors)

#### **Building 5G millimeter-wave wireless infrastructure: wide-scan focal plane arrays with broadband optical beamforming**

Smolders, A. B., Dubok, A., Tessema, N. M., Chen, Z., Al-Rawi, A. N. H., Johannsen, U., Bressner, T. A. H., Milosevic, D., Gao, H., Tangdionga, E., Gerini, G., Baltus, P. G. M., Geurts, M. & Koonen, A. M. J. 2018 (Geaccepteerd/In druk) In : *IEEE Antennas and Propagation Magazine*.

#### **Power reduced monolithic wireless sensor**

Gao, H., Matters - Kammerer, M. & Baltus, P. G. M. 2018 In : *IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology*. 2, 2, 10 blz.

#### **Damper-to-damper path loss characterization for intra-vehicular wireless sensor networks**

Costa Júnior, C. A. M., Gao, H., Le Polain, T., van Dommele, R., Smolders, B., Dheans, M. & Baltus, P. 19 dec 2017 *European Microwave Week 2017: "A Prime Year for a Prime Event", EuMW 2017 - Conference Proceedings; 47th European Microwave Conference, EuMC 2017*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1341-1344 4 blz.

#### **A 900 MHz RF energy harvesting system in 40 nm CMOS technology with efficiency peaking at 47% and higher than 30% over a 22dB wide input power range**

Wang, J., Jiang, Y., Dijkhuis, J., Dolmans, G., Gao, H. & Baltus, P. G. M. 7 nov 2017 *ESSCIRC 2017 - 43rd IEEE European Solid State Circuits Conference, 11-14 September 2017, Leuven, Belgium*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 299-302 4 blz.

#### **Damper-to-damper path loss characterization for intra-vehicular wireless sensor networks**

Mendes da Costa Jr., C. A., Gao, H., Le Polain, T., van Dommele, A. R., Smolders, A. B., Dheans, M. & Baltus, P. G. M. 12 okt 2017 *The European Microwave Conference 2017, 8-13 October 2017, Nuremberg, Germany*. Piscataway: IEEE Press, blz. 1341-1344

#### **Interpolation based wideband beamforming architecture**

Wang, B., Gao, H., Matters-Kammerer, M. & Baltus, P. G. M. 28 sep 2017 *2017 IEEE International Symposium on Circuits and Systems (ISCAS), 28-31 May 2017, Baltimore, Maryland*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-4

#### **Noise analysis of a BJT-based charge pump for low-noise PLL applications**

Dhar, D., van Zeijl, P. T. M., Milosevic, D., Gao, H. & Baltus, P. G. M. sep 2017 *2017 European Conference on Circuit Theory and Design (ECCTD), IEEE*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), 4 blz. 8093234

#### **Identifying EMC-critical devices by monitoring and classifying operating region transitions**

Duipmans, L. J., Milosevic, D., Van Der Wel, A. & Baltus, P. G. M. 31 jul 2017 *Proceedings of the 2017 11th International Workshop on the Electromagnetic Compatibility of Integrated Circuits, EMCCompo 2017, 4-8 July 2017, St. Petersburg, Russia*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 9-14 6 blz. 7998073

#### **Exploring the unknown through successive generations of low power and low resource versatile agents**

Andraud, M. N., Berkol, G., De Roose, J., Gannavarapu, S., Xin, H., Cantatore, E., Harpe, P. J. A., Verhelst, M. & Baltus, P. G. M. 11 mei 2017 *Proceedings of the 2017 Design, Automation and Test in Europe, DATE 2017, 27-31 March 2017, Lausanne, Switzerland*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 290-293 4 blz. 7927001

**A nonlinear transfer function based receiver for wideband interference suppression**

Ying, K., Gao, H., Milosevic, D. & Baltus, P. 31 jan 2017 In : Journal of Sensors. 2017, blz. 1-15 240594

**An active Ka-band shared aperture antenna with 50 dB isolation for satellite communication**

Zamanifekri, A., Lu, C., Visser, H. J., Sanders, P., Matters - Kammerer, M., Geurts, M., Baltus, P. G. M. & Smolders, A. B. 2017 In : IEEE Antennas and Wireless Propagation Letters. 16, blz. 2042-2045 4 blz.

**Bi-directional 35-Gbit/s 2D beam steered optical wireless downlink and 5-Gbit/s localized 60-GHz communication uplink for hybrid indoor wireless systems**

Khalid, A. M., Baltus, P. G. M., Dommele, A. R., Mekonnen, K. A., Cao, Z., Oh, C. W., Matters, M. K. & Koonen, A. M. J. 2017 *2017 Optical Fiber Communications Conference and Exhibition (OFC), 19-23 March 2017, Los Angeles, California*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-3 ThE1.6

**Bi-directional 35-Gbit/s 2D beam steered optical wireless downlink and 5-Gbit/s localized 60-GHz communication uplink for hybrid indoor wireless systems**

Khalid, A. M., Baltus, P. G. M., Dommele, A. R., Mekonnen, K. A., Cao, Z., Oh, C. W., Matters, M. K. & Koonen, A. M. J. 2017 *2017 Optical Fiber Communications Conference and Exhibition (OFC), 19-23 March 2017, Los Angeles, California*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-3 Th1E.6

**A 60 GHz phased array system evaluation based on a 5-bit phase shifter in CMOS technology**

Wang, B., Gao, H., Ying, K., Matters-Kammerer, M. K. & Baltus, P. G. M. 22 nov 2016 *23rd IEEE Symposium on Communications and Vehicular Technology in the Benelux (IEEE SCVT), 22 November 2016, Mons Belgium*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-4 4 blz.

**Poster : Design consideration of 60 GHz low power low-noise amplifier in 65 nm CMOS**

Chen, Z., Gao, H., van Dommele, A. R., Milosevic, D. & Baltus, P. G. M. 22 nov 2016 *23rd IEEE Symposium on Communications and Vehicular Technology in the Benelux, 22 November 2016, Mons, Belgium*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-4 4 blz.

**A 16-43 GHz low-noise amplifier with 2.5-4.0 dB noise figure**

Chen, Z., Gao, H., Leenaerts, D. M. W., Milosevic, D. & Baltus, P. G. M. 9 nov 2016 *2016 IEEE Asian Solid-State Circuits Conference (A-SSCC), November 7-9, 2016, Toyama, Japan*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 349-352 4 blz.

**A 60 GHz 5-bit digital controlled phase shifter in a digital 40-nm CMOS technology without ultra-thick metals**

Gao, H., Ying, K., Matters - Kammerer, M., Harpe, P., Wang, B., Liu, B., Serdijn, W. & Baltus, P. 15 sep 2016 In : Electronics Letters. 52, 19, blz. 1611-1613 3 blz.

**A 50-60 GHz mm-wave rectifier with bulk voltage bias in 65-nm CMOS**

Gao, H., Matters-Kammerer, M., Harpe, P. & Baltus, P. 26 jul 2016 In : IEEE Microwave and Wireless Components Letters. 26, 8, blz. 631 - 633 3 blz.

**A 48-61 GHz LNA in 40-nm CMOS with 3.6 dB minimum NF employing a metal slotting method**

Gao, H., Ying, K., Matters-Kammerer, M. K., Harpe, P., Ma, Q., van Roermund, A. & Baltus, P. 22 mei 2016 *2016 IEEE Radio Frequency Integrated Circuits Symposium (RFIC)*. Mehta, S. & Lin, L. (redacties). Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 154-157 4 blz.

**Silicon-based true-time-delay phased-array front-ends at ka-band**

Ma, Q., Leenaerts, D. M. W. & Baltus, P. G. M. 1 sep 2015 In : IEEE Transactions on Microwave Theory and Techniques. 63, 9, blz. 2942-2952 11 blz., 7181729

**System study on nonlinear suppression of varying-envelope local interference in multimode transceivers**

Habibi, H., Janssen, E., Wu, Y., Bergmans, J. & Baltus, P. 31 jul 2015 In : AEU - International Journal of Electronics and Communications. 69, 7, blz. 963-973

**Analysis of an adaptive nonlinear interference suppressor for wireless multimode transceivers**

Habibi, H., Janssen, E. J. G., Wu, Y., Baltus, P. G. M. & Bergmans, J. W. M. 2015 In : IEEE Transactions on Vehicular Technology. 64, 3, blz. 926-941 16 blz.

**A 20 GHz 1.9 dB NF LNA with distributed notch filtering for VSAT applications**

Lu, C., Matters - Kammerer, M., Mahmoudi, R. & Baltus, P. G. M. 2014 *Proceedings of the International Microwave Symposium Digest 2014 (IEEE MTT-S 2014), 1-6 June 2014, Tampa Bay, Florida*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-4

**A 50 – 60 GHz rectifier with –7dBm sensitivity for 1 V DC output voltage and 8% efficiency in 65-nm CMOS**

Gao, H., Matters - Kammerer, M., Milosevic, D., Roermund, van, A. & Baltus, P. G. M. 2014 *Proceedings of the 2014 IEEE MTT-S International Microwave Symposium (IMS 2014), 1-6 June 2014, Tampa Bay, Florida*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-3

**A 60-GHz energy harvesting module with on-chip antenna and switch for co-integration with ULP radios in 65-nm CMOS with fully wireless mm-wave power transfer measurement**

Gao, H., Matters - Kammerer, M., Harpe, P. J. A., Milosevic, D., Roermund, van, A. H. M., Linnartz, J. P. M. G. & Baltus, P. G. M. 2014 *Proceedings of the International Symposium on Circuits and Systems (ISCAS2014), 1-5 June 2014, Melbourne, Australia*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1640-1643

**A 60-GHz injection locked oscillator for self-demodulation ultra-low power radio in 65-nm CMOS**

Gao, H., Matters - Kammerer, M., Li, X., Milosevic, D., van Roermund, A. & Baltus, P. G. M. 2014 *2014 IEEE 21st Symposium on Communications and Vehicular Technology in the Benelux (SCVT)*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), 4 blz.

**A millimeter-wave tunable transformer-based dual-antenna duplexer with 50 dB isolation**

Lu, C., Matters - Kammerer, M., Mahmoudi, R. & Baltus, P. G. M. 2014 *IEEE Custom Integrated Circuits Conference, 15-17 September 2014, San Jose, California, USA*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE)

**A scalable baseband phase shifter with 12 GHz I/Q mixers in 40-nm CMOS for 60 GHz applications**

Lu, C., Matters - Kammerer, M., Habekotte, E., Hartingsveldt, van, K., Wilt, van der, F. P., Mahmoudi, R. & Baltus, P. G. M. 2014 *Proceedings of the IEEE International Symposium on Circuits and systems (ISCAS), 1-5 June 2014, Melbourne, Australia*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 2708-2711

**Differential 60 GHz Antenna-on-Chip in mainstream 65 nm CMOS technology**

Smolders, A. B., Johannsen, U., Liu, M., Yu, Y. & Baltus, P. G. M. 2014 *Proceedings of the Antennas and Propagation Society International Symposium (APSURSI), 6-11 July 2014, Memphis, Tennessee, USA*. Institute of Electrical and Electronics Engineers (IEEE), blz. 356-357

**Feasibility study on analogue cancellation of local interference in multimode transceivers**

Habibi, H., Zamanifekri, A., Janssen, E. J. G., Wu, Y., Baltus, P. G. M. & Bergmans, J. W. M. 2014 *Proceedings of the 20th European Wireless Conference, European Wireless 2014; 14-16 May 2014, Barcelona, Spain*. Berlin: VDE Verlag, blz. 980-983

**Front end power dissipation minimization and optimal transmission rate for wireless receivers**

Heuvel, van den, J. H. C., Wu, Y., Baltus, P. G. M., Linnartz, J. P. M. G. & Roermund, van, A. H. M. 2014 In : IEEE Transactions on Circuits and Systems. I, Fundamental Theory and Applications. 61, 5, blz. 1566-1577 12 blz.

**A 48 GHz 6-bit LO-Path Phase Shifter in 40-nm CMOS for 60 GHz Applications**

Lu, C., Matters - Kammerer, M., Habekotte, E., Hartingsveldt, van, K., Wilt, van der, F. P., Mahmoudi, R. & Baltus, P. G. M. 2013 *Proceedings of the 39th European Solid-State Circuits Conference (ESSCIRC), 16-20 September 2013, Bucharest, Romania*. Romania, blz. 73-76

**A 60-GHz rectenna for monolithic wireless sensor tags**

Gao, H., Johannsen, U., Matters - Kammerer, M., Milosevic, D., Smolders, A. B., Roermund, van, A. H. M. & Baltus, P. G. M. 2013 *Proceedings of the IEEE International Symposium on Circuits and Systems (ISCAS), 19-23 May 2013, Beijing, China*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 2796-2799

**A 62GHz inductor-peaked rectifier with 7% efficiency**

Gao, H., Matters - Kammerer, M., Milosevic, D., Roermund, van, A. H. M. & Baltus, P. G. M. 2013 *Proceedings of the 2013 IEEE Radio Frequency Integrated Circuits Symposium (RFIC 2013)*, 2-4- June, Seattle, USA. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 189-192

**A 71GHz RF energy harvesting tag with 8% efficiency for wireless temperature sensors in 65nm CMOS**

Gao, H., Matters - Kammerer, M., Harpe, P. J. A., Milosevic, D., Johannsen, U., Roermund, van, A. H. M. & Baltus, P. G. M. 2013 *Proceedings of the 2013 IEEE Radio Frequency Integrated Circuits Symposium (RFIC 2013)*, 2-4- June, Seattle, USA. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 403-406

**A design of 2.4GHz rectifier in 65nm CMOS with 31% efficiency**

Gao, H., Matters - Kammerer, M., Milosevic, D., Linnartz, J. P. M. G. & Baltus, P. G. M. 2013 *Proceedings of the 2013 IEEE 20th Symposium on Communications and Vehicular Technology in the Benelux (SCVT)*, 21 November 2013, Namur, Belgium. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-4

**A design of 60GHz LNA with 3.6dB NF and 17dB Gain in 40nm CMOS**

Gao, H., Matters - Kammerer, M., Milosevic, D. & Baltus, P. G. M. 2013

**A design of 60GHz LNA with 4.8dB NF, 15dB gain and 5mW in 65nm CMOS**

Chen, Z., Gao, H., Li, X., Baltus, P. G. M. & Roermund, van, A. 2013

**Adaptive nonlinear interference suppressor for cognitive radio applications**

Habibi, H., PooH Ling, E., Janssen, E. J. G., Wu, Y., Milosevic, D., Bergmans, J. W. M. & Baltus, P. G. M. 2013 *Proceedings of the Workshop on Cognitive Radio*, 18-19 June 2013, Kista, Sweden. blz. 16-20

**Closed-loop adaptation of a nonlinear interference suppressor for local interference in multimode transceivers**

Habibi, H., Janssen, E. J. G., Wu, Y., Baltus, P. G. M. & Bergmans, J. W. M. 2013 *Proceedings of 34th Symposium on Information Theory in the Benelux 30 and 31 May 2013, Leuven, Belgium*. Pollin, S., Perre, Van der, L. & Stas, A. (redacties). Leuven, Belgium, blz. 61-68

**Co-integration of an RF energy harvester into a 2.4 GHz transceiver**

Masuch, J., Delgado-Restituto, M., Milosevic, D. & Baltus, P. G. M. 2013 In : *IEEE Journal of Solid-State Circuits*. 48, 7, blz. 1565-1574 10 blz.

**Experimental evaluation of an adaptive nonlinear interference suppressor for multimode transceivers**

Habibi, H., Janssen, E. J. G., Hilkens, R. G. M., Wu, Y., Milosevic, D., Baltus, P. G. M. & Bergmans, J. W. M. 2013 In : *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*. 3, 4, blz. 602-614 13 blz.

**High resolution phase shifter for a mm-wave adaptive null-forming array**

Lu, C., Matters - Kammerer, M., Habekotte, E., Hartingsveldt, van, K., Wilt, van der, F. P., Mahmoudi, R. & Baltus, P. G. M. 2013 *Par4CR Workshop on Cognitive Radio at the 39th European Solid-State Circuit Conference*, 16-20 September 2013, Bucharest, Romania.

**Modeling of RF energy scavenging for batteryless wireless sensors with low input power**

Wu, Y., Linnartz, J. P. M. G., Gao, H., Matters - Kammerer, M. & Baltus, P. G. M. 2013 *Proceedings of the 24th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, 8-11 September 2013, London. London, blz. 527-531

**Nonlinear interference suppressor for varying-envelope local interference in multimode transceivers**

Habibi, H., Janssen, E. J. G., Wu, Y., Baltus, P. G. M. & Bergmans, J. W. M. 2013 *Proceedings of 34th Symposium on Information Theory in the Benelux 30 and 31 May 2013, Leuven, Belgium*. Pollin, S., Perre, Van der, L. & Stas, A. (redacties). Enschede: Universiteit Twente, blz. 61-68

#### **Robust null-forming in a mm-wave adaptive array with discrete phase shifting schemes**

Lu, C., Wu, Y., Mahmoudi, R., Matters - Kammerer, M., Habekotte, E., Hartingsveldt, van, K., Wilt, van der, F. P. & Baltus, P. G. M. 2013 *Proceedings of Workshop on Partnerships for Cognitive Radio (PAR4CR), 18-19 June 2013, Kista, Sweden*. blz. 123-126

#### **Smart self-interference suppression by exploiting a nonlinearity**

Janssen, E. J. G., Habibi, H., Milosevic, D., Baltus, P. G. M. & Roermund, van, A. H. M. 2013 *Frequency references, power management for SoC, and smart wireless interfaces : advances in analog circuit design 2013*. Baschirotto, A., Makinwa, K. A. A. & Harpe, P. J. A. (redacties). Dordrecht: Springer, blz. 249-263

#### **Suppression of constant modulus interference in multimode transceivers using an adaptive nonlinear circuit**

Habibi, H., Janssen, E. J. G., Wu, Y., Milosevic, D., Baltus, P. G. M. & Bergmans, J. W. M. 2013 *NASA/ESA conference on adaptive hardware and systems(AHS-2013), 25-27 June 2013, Turin, Italy*. Turin, Italy

#### **System analysis and energy model for radio-triggered battery-less monolithic wireless sensor receiver**

Gao, H., Wu, Y., Matters - Kammerer, M., Roermund, van, A. & Baltus, P. G. M. 2013 *Proceedings of the IEEE International Symposium on Circuits and Systems (ISCAS), 19-23 May 2013, Beijing, China*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1572-1575

#### **System analysis and energy model of 60GHz radio-triggered wireless sensor receiver**

Gao, H., Wu, Y., Matters - Kammerer, M., Milosevic, D., Linnartz, J. P. M. G. & Baltus, P. 2013 *Proceedings of the 2013 IEEE 20th Symposium on Communications and Vehicular Technology in the Benelux (SCVT), 21 November 2013, Namur, Belgium*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-4

#### **A 1.8GHz amplifier with 39dB frequency-independent smart self-interference blocker suppression**

Janssen, E. J. G., Milosevic, D. & Baltus, P. G. M. 2012 *Proceedings of the Radio Frequency Integrated Circuits Symposium (RFIC), 17 - 19 June 2012, Montreal, Canada*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 97-100

#### **A broadband frontend design for UHF RFID tag**

Ma, Q., El Waffaoui, R., Baltus, P. G. M. & Roermund, van, A. H. M. 2012 *Proceedings of the 19th IEEE Symposium on Communications and Vehicular Technology in the Benelux (IEEE SCVT 2012), 16 November 2012, Eindhoven, The Netherlands*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-12

#### **A mm-wave analog adaptive array with genetic algorithm for interference mitigation**

Lu, C., Wu, Y., Mahmoudi, R., Matters - Kammerer, M. & Baltus, P. G. M. 2012 *Proceedings of the IEEE International Symposium on Circuits and systems (ISCAS), 20-23 May 2012, Seoul, Korea*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 2373-2376

#### **A mm-wave analog adaptive array with genetic algorithm for interference mitigation**

Lu, C., Wu, Y., Mahmoudi, R., Matters - Kammerer, M. & Baltus, P. G. M. 2012

#### **An RF energy harvester with supply management for co-integration into a 2.4 GHz transceiver**

Masuch, J., Delgado-Restituto, M., Milosevic, D. & Baltus, P. G. M. 2012 *Proceedings of the 38th European Solid-State Circuits Conference (ESSCIRC), 17-22 September 2012, Bordeaux, France*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 113-116

#### **An RF-to-DC energy harvester for co-integration in a low-power 2.4 GHz transceiver frontend**

Masuch, J., Delgado-Restituto, M., Milosevic, D. & Baltus, P. G. M. 2012 *Proceedings of IEEE International Symposium on Circuits and Systems (ISCAS), 20-23 May, Seoul, Korea*. blz. 680-683

#### **Digital hardware resources for steering a nonlinear interference suppressor**

Janssen, E. J. G., Habibi, H., Milosevic, D., Baltus, P. G. M. & Roermund, van, A. H. M. 2012 *Proceedings of the 19th International Conference Mixed Design of Integrated Circuits and Systems (MIXDES), 24 - 26 May 2012, Warschau, Poland*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 133-138

**Frequency-independent smart interference suppression for multi-standard transceivers**

Janssen, E. J. G., Habibi, H., Milosevic, D., Baltus, P. G. M. & Roermund, van, A. H. M. 2012 *Proceedings of the 42st European Microwave Conference (EuMC), 29 October - 1 November 2012, Amsterdam, The Netherlands*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 909-912

**Full MIMO spatial filtering approach for dynamic range reduction in wideband cognitive radios**

Heuvel, van den, J. H. C., Linnartz, J. P. M. G., Baltus, P. G. M. & Cabric, D. 2012 In : *IEEE Transactions on Circuits and Systems I: Regular Papers*. 59, 11, blz. 2761-2773

**Suppression of constant modulus interference in multimode transceivers by closed-loop tuning of a nonlinear circuit**

Habibi, H., Janssen, E. J. G., Wu, Y., Bergmans, J. W. M. & Baltus, P. G. M. 2012 *Proceedings of the IEEE 75th Vehicular Technology Conference (VTC Spring 2012), 6-9 May 2012, Yokohama, Japan*. Piscataway: Institute of Electrical and Electronics Engineers (IEEE), blz. 1-6

**System study of a wireless-powered sensor system**

Gao, H., Wu, Y., Baltus, P. G. M., Linnartz, J. P. M. G. & Roermund, van, A. H. M. 2012 *Proceedings of the 23rd Annual Workshop on Circuits and Systems and Signal Processing, ProRISC 2012, 22-23 October 2012, Rotterdam, The Netherlands*.

**Ultra-low power 60 GHz low noise amplifier design**

Chen, Z., Baltus, P. G. M., Gao, H. & Li, X. 2012

**2.4GHz energy harvesting for ultra low power radio**

Gao, H., Baltus, P. G. M., Mahmoudi, R. & Roermund, van, A. 2011 *Proceedings of the 1st International Workshop on Wireless Energy Transport and Harvesting (IWWETH), 28 June 2011, Eindhoven, The Netherlands*.

**2.4GHz energy harvesting for wireless sensor network**

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**A 107 GHz LNA in 65nm CMOS with inductive neutralization and slow-wave transmission lines**

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## **Activiteiten**

### **Mikrocentrum Seminar Smart Environment, High Tech Campus, Eindhoven, the Netherlands**

Baltus, P. G. (Hoofdspreker)

8 jun 2010

### **CICC 2001, San Diego U.S.A.**

Baltus, P. G. (Organisator)

6 mei 2001

## **Projecten**