

List of publications (until 04/2009)

Journals (peer-reviewed)

- [1] V. Michal, J. Sedlacek. “*Low-pass biquadratic filters with high suppression rate*”, Electronics Letters, Volume 45, Issue 12, p. 591-593 (2009).
- [2] V. Michal et al. “*Fixed-gain CMOS differential amplifiers with no external feedback for a wide temperature range*”, Cryogenic, doi:10.1016/j.cryogenics.2008.12.014 (2009).

International conferences and workshops

- [3] V. Michal, J. Sedláček, K. Hájek, “*Low-Pass Cascade Filters with High Attenuation Rate in the Stopband*”, Proceeding of the IEEE int. Conference Radioelek (2009).
- [4] V. Michal, S. Bouat, J-C Villegier, J. Sedláček, “*Superconducting NbN Band-Pass Filter and Matching Circuit for 30GHz RSFQ Data Converter*”, Proceeding of the IEEE int. Conference Radioelek (2009).
- [5] V. Michal, A. Kreisler, A. Degardin, G.Klisnick, G. Sou, M. Redon, “*Fixed-gain CMOS Differential Amplifiers for the 40 K to 390 K Temperature Range*”. Proceeding of 8th European Workshop on Low Temperature Electronics (WOLTE 8), Ilmenau, Allemagne (23-26 June 2008), Oral presentation.
- [6] V. Michal, S. Bouat and J.C. Villegier, “*Design of NbN Superconducting Band Pass Filters at 30 GHz for High Speed RSFQ Data converter*”, International Workshop on Teleinformatics and Electromagnetic Field TIEF 2008 8. - 12. 9. 2008 Paris, ISBN 978-80-214-3718-0.
- [7] V.Michal “*New approaches of read-out electronics for superconducting single photon detectors*”, 1st Karlsruhe Detector Workshop, S-Pulse project, oral presentation (May 2008).
- [8] A. Kresiler, M. Longhin, V. Michal, M. Aurino, V. Jagtap, I. Türer, X. Gaztelu, A. Scheuring & A.F. Dégardin, “*NANOTIME project: superconducting and semiconducting YBaCuO thin film bolometer investigations for THz imaging arrays*”, 1st Karlsruhe Detector Workshop, S-Pulse project, Invited presentation (May 2008).
- [9] V. Jagtap, M. Longhin, V. Michal, A.F. Degardin, P. Teste, A.J. Kresiler, G. Klisnick, G. Sou, M. Redon, “*Semiconducting vs superconducting YBaCuO thin film bolometers: sensitivity and crosstalk investigations for future far-infrared imagers*”, Invited Poster, Applied Superconductivity Conference (ASC 08) Chicago, USA.
- [10] E. Baggetta, S. Bouat, V. Michal, J.-C.Villegier, I, D. Renaud, Ch. Bornier, P. Lefevre, R. Guelaz, P. Lumeau “*Elaboration of NbN ADC circuits on large area wafers for HyperSCAN*”, Poster, Applied Superconductivity Conference (ASC 08) Chicago, USA.
- [11] P. Febvre, D. Bouis, V. Michal, R. Setzu, J.-C. Villégier, “*Evaluation of self-shunted NbN/TaN/NbN Josephson junctions for digital electronics*”. Poster, Applied Superconductivity Conference (ASC 08) Chicago, USA.
- [12] R. Setzu, S. Bouat, V. Michal, J.-C. Villegier, I, D. Renaud, “*Study of NbN Josephson Junctions with Barrier Tuned to the Metal-Insulator Transition*”. Poster, Applied Superconductivity Conference (ASC 08) Chicago, USA.
- [13] V. Michal, A. Kreisler, A. Degardin, G.Klisnick, G. Sou, M. Redon, “*Integrated readout electronics for THz bolometric detector characterization*”. Poster, International Workshop on Teleinformatics and Electromagnetic Field TIEF 2007, 1. - 5. 7. 2006 Epita-Paris.

- [14] E. Bagetta, V. Michal, R. Setzu, J-C. Villegier, “*Implementation of a Superconducting High Frequency Divider Circuit with NbN/TaXN/NbN Josephson Junctions*”. Poster, International Workshop on Teleinformatics and Electromagnetic Field TIEF 2007, 1. - 5. 7. 2006 Paris presentation.
- [15] Ch. Péroz, A.F. Dégardin, V. Michal & A.J. Kreisler; J-C. Villegier; G. Beaudin, Y. Delorme & A. Ferret; M. Redon, A. Sentz, G. Klisnick & D. Prele, “*Fabrication and characterization of ultrathin PBCO/YBCO/PBCO constrictions for hot electron bolometer terahertz mixing application*” Invited poster, Applied Superconductivity Conference (ASC’06), Seattle, USA (August 2006).
- [16] V.Michal, K.Hájek, J.Sedláček. “*Active filters based on goal-directed lossy RLC prototypes*”. Proceeding of Int. conference on fundamentals of electrotechnics and circuit theory 2006. Gliwice-Ustron: Silesian University of Technology, 2006. s. 393-396. ISBN: 83-85940-28-6.
- [17] V.Michal, K.Hájek, J.Sedláček, “*Non-ideal performance of active biquadratic filter blocks*”. Proceeding of Int. conference on fundamentals of electrotechnics and circuit theory 2006. Gliwice-Ustron: Silesian University of Technology, 2006. s. 397-400. ISBN: 83-85940-28-6.
- [18] V. Michal, K.Hájek, J.Sedláček, “*Modern operational amplifiers and their degeneracy effects on active filter performance*”. Proceeding of Int. conference on fundamentals of electrotechnics and circuit theory 2006. Gliwice-Ustron: Silesian University of Technology, 2006. s. 505-507. ISBN: 83-85940-28-6.
- [19] K.Hájek, V.Michal, J.Sedláček, “*Real parameters of active filter sections used by non-cascade synthesis*”. In Electronics Devices and Systems IMAPS 06. Brno: VUT Brno FEKT, 2006. s. 85-90. ISBN: 80-214-3246-2.
- [20] K.Hájek, V.Michal, J.Sedláček, “*A non-cascade synthesis of optimized ARC filters*”. Proceeding of International Workshop ISEP - DTEE Brno: VUT Brno, FEKT, 2006. s. 1-4. ISBN: 80-214-3250-0.
- [21] K.Hájek, V.Michal, J.Sedláček, “*Active filter blocks for non-cascade filter synthesis*”. Proceeding of International Workshop ISEP - DTEE. Brno: VUT Brno FEKT, 2006. s. 1-6. ISBN: 80-214-3250-0.
- [22] K.Hájek, V.Michal, J.Sedláček, “*Real properties of two active biquadratic filter sections*”. In Digital Technologies 2005 DT’05. Žilina: EDIS -Žilina university publishers, 2005. s. 44-47. ISBN: 80-8070-486-4.
- [23] K.Hájek, J.Sedláček, V. Michal, “*An interactive control of universal analog filter*”. In AMTEE ’05 Seventh International Conference on Advanced Methods in the Theory of Electrical Engineering Applied to Power. Plzeň, 2005. s. 13-18. ISBN: 80-7043-392-2.
- [24] K.Hájek, V.Michal, J.Sedláček, “*A New Integral System of Cascade Frequency Filter Design*”. In IC-SPETO 2005. Gliwice-Ustroň: Institute of theoretical and industrial engineering, 2005. s. 467-470. ISBN: 83-85940-27-8.
- [25] V. Mchal, K.Hájek. J.Sedláček, “*The Analog Filter Design and Interactive Analog Signal Processing by PC Control*”. In Application of electrical engineering (AEE 05). Praha: WSEAS, 2005. s. 119-122. ISBN: 960-8457-13-0.
- [26] K.Hájek., J.Sedláček, B.Sviezeny, V. Michal, “*Universal Digitally Controlled Analog Filter*. In Radioelektronika 2003. Brno: 2003. s. 29-32. ISBN: 80-214-2383-8.

National workshops and publications

- [27] A. Kreisler, A. Dégardin, M. Longhin, V. Michal, “*Bolomètres supraconducteurs dans le domaine terahertz : une large famille de dispositifs et d’applications*”, 3rd National Workshop on Superconductivity of the French network SEFIRA (Rustrel, France, 4-6 April 2006), Oral presentation.

- [28] K.Hájek, V.Michal, J.Sedláček, “*An optimization of non-cascade realized active filters using lossy RLC prototypes*”. In Electronic Devices and Systems. Brno: VUT Brno, 2006. s. 79-84. ISBN: 80-214-3246-2.
- [29] J. Sedláček, M.Murina, M.Steinbauer, V.Michal, “*Elektrotechnika 2, laboratorní a počítačová cvičení*”. BRNO: Ing. Zdeněk Novotný, CSc., Ondráčkova 105, 628 00 Brno, 2006. s. 1-148. ISBN: 80-214-3127-X.
- [30] V.Michal, “*Bezdrátový mikrofón VKV*”, Journal Praktická elektronika PE 12/2006, ISSN: 1211-328X.
- [31] M. Steinbauer, M. Murina, V.Michal, J.Sedláček, “*Elektrotechnika 2 - laboratorní cvičení, počítačová cvičení*”. Brno: Ing. Zdeněk Novotný, CSc. Ondráčkova 105, 628 00 Brno, 2005. s. 1-152. ISBN: 80-214-2862-7.
- [32] V.Michal, “*Conception of universal digitally controled analog filter*”. In Sborník příspěvků konference Radešín 2004. Brno: FEKT VUT BRNO, 2004. s. 89-90. ISBN: 80-214-2726-4.
- [33] V.Michal, “*Mikroprocesorový časovač*”, Journal Praktická elektronika PE9/2000, ISSN: 1211-328X.
- [34] V. Michal, “*Automaticky telegrafní klic*” Proceeding of student conference Student EEICT 2002, Brno. Avarđ for the best presentation.
- [35] V.Michal, “*Modem pro komunikaci po vedení 220V*” Proceeding of student conference Student EEICT 2001, Brno. Avarđ for the best presentation.
- [36] V.Michal, “*čítač 1.3GHz*”, AMA, Journal of Czech Radioclub, 6/1998.