

Lista lucrărilor

1. Lista lucrărilor relevante

Aldo De Sabata, Ladislau Matekovits, "Electromagnetic Band-Gap Solution for Mitigation of Parallel-Plate Noise in Power Distribution Networks", *Microwave and Optical Technology Letters*, vol. 54, no. 7, pp. 1689-1692, 2012, ISSN 0895-2477, DOI: 10.1002/mop

Aldo De Sabata, Ladislau Matekovits, "Unit cell geometry in stripline technology featuring sequential band-gaps between every two consecutive modes", *IEEE Antennas and Wireles Propagation Letters*, vol. 11, pp. 97-100, 2012, ISSN 1536-1225, DOI: 10.1109/LAWP.2012.2183848

Ladislau Matekovits, Aldo De Sabata, Karu P. Esselle, "Effects of a coplanar waveguide biasing network built into the ground plane on the dispersion characteristics of a tunable unit cell with an elliptical patch and multiple vias", *IEEE Antennas and Wireles Propagation Letters*, vol. 10, pp. 1088-1091, 2011, ISSN 1536-1225, DOI: 10.1109/LAWP.2011.2170653

Ioan Luminosu, Coleta de Sabata, Aldo De Sabata, "Solar Energy Based Industrial Applications at the "Politehnica" University of Timișoara", *Thermal Science*, vol. 15, no. 3, pp. 587-598, 2011, DOI: 10.2298/TSCI100127026L ISSN 0354-9836.

Ioan Luminosu, Coleta De Sabata, Aldo De Sabata, "Research in Solar Energy at the "Politehnica" University of Timișoara", *Thermal Science*, vol. 14, no. 1, Jan. 2010, pp. 157-169, DOI: 10.2298/TSCI10011571, ISSN 0354-9836.

Liviu Toma, Aldo De Sabata, Robert Pazsitka, "Iterative procedure for real single-tone frequency estimation", *Revue Roumaine De Sciences Techniques, Electrotechnique Et Energetique*, 54, 3, pp. 253-260, 2009, ISSN 0035-4066.

Liviu Toma, Aldo De Sabata, Gabriel Vasiiu, "Two-step procedure decreases variance in tone frequency estimation", *Revue Roumaine de Sciences Techniques, Eléctrotechnique et Enérgétique*, 52, 4, pp. 463-474, 2007, ISSN 0035-4066.

Ioan De Sabata, Aldo De Sabata, "Magnetic fluid bearings with poles on the shaft", *Rev. Roum. Sci. Techn. - Eléctrotechn. et Enérg.*, 48, 2/3, 381-391, 2003, ISSN 0035-4066.

Bernhard Rothenstein, Aldo De Sabata, "Frequency shifts for acelerated sources and observers: an illustration of non-locality in frequency measurement", *Eur. J. Phys.*, **19** (6), 569-574, 1998, 0143-0807, DOI: 10.1088/0143-0807/19/6/010

Aldo De Sabata, "Extension of a finite version of the sampling theorem", *IEEE Transactions on Circuits and Systems II*, vol. 41, no. 12, pp. 821-823, Dec. 1994, ISSN1 1549-7747, ISSN21057-7130, ISSN3 1559-3791 (ARC), DOI: 10.1109/82.338625.

2. Teza de doctorat

Aldo De Sabata, "Eșantionare adaptivă pentru compresie de date", Universitatea "Politehnica" București, cond. șt. prof. dr. ing. Alexandru Spătaru, 1992.

3. Cărți și capitole în cărți

Ioan Luminosu, Aldo De Sabata, Coleta De Sabata, *Applications Oriented Research on Solar Collectors at the "Politehnica" University of Timișoara*, in Reccab M. Ochieng Ed., *Solar Collectors and Panels, Theory and Applications*, Rijeka, Croatia: Sciyo, pp. 379-404, ISBN 978-953-307-142-8

Coleta De Sabata, Ioan Luminosu, Aldo De Sabata, *Tradiție și perspective în energetica solară la Universitatea "Politehnica" din Timișoara*, Timișoara: Excelsior Art, 2010, 214 pagini, ISBN 978-973-592-248-1.

Alimpie Ignea, Traian Jurca, Aldo De Sabata, Ciprian Dughir, Adrian Mihăiuiți, *Aspecte privind monitorizarea perturbațiilor dintr-un site*, Timișoara: Waldpress, 2006, ISBN 973-7878-22-1, 100 p.

Alimpie Ignea, Eugen Mârza, Aldo De Sabata, *Antene și propagare*, Timișoara: Ed. de Vest, 2002, 310 p., ISBN 973-36-0351-1.

Aldo De Sabata, *Tehnica frecvențelor înalte*, Timișoara: Ed. "Orizonturi Universitare", 2001, 117 p., ISBN 973-8109-57-4.

Aldo De Sabata, *Metode adaptive în tehnica măsurării*, Timișoara: Ed. "Politehnica", 2001, 108 p., ISBN 973-8247-40-3.

Bernhard Rothenstein, Aldo De Sabata, *Teoria Relativității Speciale*, Timișoara: Ed. Eurobit, 1999, 124 p., ISBN 973-9336-10-8.

Aldo De Sabata, *Măsurări cu microunde și optoelectronice*, Timișoara: Lit. Univ. "Politehnica", 210 p., 1996.

Alexandru Isar, Corina Botoca, Aldo De Sabata, *Semnale, circuite și sisteme, culegere de probleme*, Timișoara: Lit. Univ. "Politehnica", 120 p., 1995.

4. Articole publicate în reviste din fluxul științific internațional principal

Aldo De Sabata, Ladislau Matekovits, "Electromagnetic Band-Gap Solution for Mitigation of Parallel-Plate Noise in Power Distribution Networks", *Microwave and Optical Technology Letters*, vol. 54, no. 7, pp. 1689-1692, 2012, ISSN 0895-2477. DOI: 10.1002/mop

Aldo De Sabata, Ladislau Matekovits, "Unit cell geometry in stripline technology featuring sequential band-gaps between every two consecutive modes", *IEEE Antennas and Wireles Propagation Letters*, vol. 11, pp. 97-100, 2012, ISSN 1536-1225, DOI: 10.1109/LAWP.2012.2183848.

Ioan Luminosu, Aldo De Sabata, Coleta De Sabata, Traian Jurca, "Solar collectors for recyclable materials", *Journal of Environmental Protection and Ecology*, vol. 13, no. 1, pp. 300-306, 2012, ISSN 1311-5065.

Ladislau Matekovits, Aldo De Sabata, Karu P. Esselle, "Effects of a coplanar waveguide biasing network built into the ground plane on the dispersion characteristics of a tunable unit cell with an elliptical patch and multiple vias", *IEEE Antennas and Wireles Propagation Letters*, vol. 10, pp. 1088-1091, 2011, ISSN 1536-1225, DOI: 10.1109/LAWP.2011.2170653, IRS=2.01024.

Coleta De Sabata, Floricica Barvinschi, Aldo De Sabata, Ioan Luminosu, Traian Jurca, "Ecological wastewater cleaning of swine farms using solar energy", *Journal of Environmental Protection and Ecology*, vol. 12, no. 3A, pp. 1510-1516, 2011, ISSN 1311-5065

Ioan Luminosu, Coleta de Sabata, Aldo De Sabata, "Solar Energy Based Industrial Applications at the "Politehnica" University of Timișoara", *Thermal Science*, vol. 15, no. 3, pp. 587-598, 2011, DOI: 10.2298/TSCI100127026L ISSN 0354-9836.

Ioan Luminosu, Coleta De Sabata, Aldo De Sabata, "Research in Solar Energy at the "Politehnica" University of Timișoara", *Thermal Science*, vol. 14, no. 1, Jan. 2010, pp. 157-169, DOI: 10.2298/TSCI10011571, ISSN 0354-9836.

Liviu Toma, Aldo De Sabata, Gabriel Vasii, "Two-step procedure decreases variance in tone frequency estimation", *Revue Roumaine de Sciences Techniques, Électrotechnique et Énergie*, 52, 4, pp. 463-474, 2007, ISSN 0035-4066.

Ioan De Sabata, Aldo De Sabata, "Magnetic fluid bearings with poles on the shaft", *Rev. Roum. Sci. Techn. - Électrotechn. et Énerg.*, 48, 2/3, 381-391, 2003, ISSN 0035-4066.

Ioan De Sabata, Aldo De Sabata, "On magnetic fluid bearings with alternating poles", *Rev. Roum. Sci. Techn. - Électrotechn. et Énerg.*, 47, 3, pp. 295-306, 2002, ISSN 0035-4066

Ioan De Sabata, Marian Greconici, Aldo De Sabata, "Restoring force acting on a rotor with alternating poles in a magnetic fluid", *Rev. Roum. Sci. Techn. - Électrotechn. et Énerg.*, 46, 1, pp. 79-88, 2001, ISSN 0035-4066.

Bernhard Rothenstein, Aldo De Sabata, "Frequency shifts for accelerated sources and observers: an illustration of non-locality in frequency measurement", *Eur. J. Phys.*, **19** (6), 569-574, 1998, 0143-0807, DOI: 10.1088/0143-0807/19/6/010

Bernard Rothenstein, Aldo De Sabata, "An uncommon way to Special relativity", *Eur. J. Phys.*, **18** (4), pp. 263-266, 1997, 0143-0807, DOI: 10.1088/0143-0807/18/4/003.

Aldo De Sabata, "Extension of a finite version of the sampling theorem", *IEEE Transactions on Circuits and Systems II*, vol. 41, no. 12, pp. 821-823, Dec. 1994, ISSN1 1549-7747, ISSN2 1057-7130, ISSN3 1559-3791, DOI: 10.1109/82.338625.

5. Publicații în lucrările principalelor conferințe internaționale de specialitate

5.1. Conferințe internaționale în străinătate

Ladislau Matekovits, Aldo De Sabata, "Some design parameters for high Q filters built in metamaterial technology", *6th European Conference on Antennas and Propagation, EUCAP 2012*, Prague, Czech Republic, March 26-30, pp. 1-4, 2012.

Ladislau Matekovits, Aldo De Sabata, "Highly selective multiband metamaterial bandpass filter", *IEEE International Workshop on Antenna Technology, IWAT 2012*, March 5-7, Tucson Arizona, pp. 40-43, 2012.

Ladislau Matekovits, Aldo De Sabata, "Parametric assessment of properties of a periodically patterned surface with non-uniform rectangular spiral metallization in the unit cell", *IEEE International Symp. on Antennas and Propag. and USNC-URSI National Radio Science Meeting, APS-URSI 2012*, July 8-14, Spokane, Ill., to appear, 2012.

Aldo De Sabata, Ladislau Matekovits, Marius Silaghi, Ulrich L. Rhode, "Investigation on the scaling properties of a novel electromagnetic band-gap structure for application to parallel-plate noise suppression", *EMC Europe*, Roma 2012, Sept. 17-21, to appear, 2012.

Ladislau Matekovits, Aldo de Sabata, "Photonic band-gap with electronically reconfigurable geometry", *EUROCON - International Conference on Computer as a Tool*, Lisabona, April 11-14, pp. 1-4, ISBN: 978-142447486-8, DOI: 10.1109/EUROCON.2011.5929163, www.eurocon2011.it.pt, 2011.

Ladislau Matekovits, Aldo De Sabata, "Novel multiband wideband filter relying on metamaterial technology", *IWAT 2011: 2011 IEEE International Workshop on Antenna Technology: Small*

Antennas, Novel Structures and Innovative Metamaterials, Article number 5752369, pp. 372-375, DOI: 10.1109/IWAT.2011.5752369 ISSN <http://www.iwat2011.hk/index.php>, 2011.

Ladislau Matekovits, Aldo De Sabata, Ildiko Peter, "Variation of characteristics of a microwave photonic band gap structure versus the dielectric constant in inhomogeneous parallel plate waveguide", *2011 IEEE International Symposium on Antennas and Propagation and USNC/URSI National Radio Science Meeting*, Spokane, Washington, USA, July 3-8, pp. 1836-1839, DOI: 10.1109/APS.2011.5996854, ISBN: 978-1-4244-9561-0, 2011, <http://www.apsursi2011.org/>

Ladislau Matekovits, Karu P. Esselle, Aldo De Sabata, Mario Orefice, "Some issues on the constructive constraints and their effects in the design of active periodic leaky-wave antennas", *12th Australian Symposium on Antennas, Sydney, Australia*, February 16-17, **Invited Talk**, Abstracts, p. 8, 2011, ISBN 978 0 643 10168 5, <http://research.ict.csiro.au/conferences/asa/12th-asa>

Ladislau Matekovits, Aldo De Sabata, Ildiko Peter, "Influence of magnetic permeability on dispersion diagrams of a parallel-plate waveguide built with metamaterials", *Proc. of Asia-Pacific Microwaves Conference, Melbourne, Australia, 5-8 December, 2011*, pp. 1746-1749, 2011, ISBN: 978-0-85825-974-4 (fără DOI pe IEEE), <http://www.apmc2011.com/>

Aldo De Sabata, Ladislau Matekovits, Ulrich L. Rhode, Marius A. Silaghi, "Metamaterial based microwave band-pass filter", *Annals of DAAAM for 2011 & Proceedings of the 22nd International DAAAM Symposium "Intelligent Manufacturing & Automation: Power of Knowledge and Creativity"*, 23-26th November, 2011, pp. 1267-1268, ISBN 978-3-901509-83-4, ISSN 1726-9679, Ed. Branko Katalinic, Vienna, Austria, 2011.

Ladislau Matekovits, Aldo De Sabata, "Analysis of the gap bandwidth of some high impedance surfaces in the microwave range", *Materials Science Forum (Proc. of JAPMED 2011, Budapest)*, vol. 670, pp. 497-503, DOI: 10.4028/www.scientific.net/MSF.670.497, ISSN: 1662-9752, 2011.

Traian Jurca, Eugenia Tulcan-Paulescu, Ciprian Dughir, Mihaela Lascu, Paul Gavrilă, Aldo De Sabata, Ioan Luminosu, Coleta De Sabata, Marius Paulescu, "Global solar irradiation modeling and Measurements in Timișoara", *Physics Conference TIM-10*, 3 Oct. 2011, AIP Conf. Proc 1387, pp. 253-258, 2011, DOI: 10.1063/1.3647083, 978-0-7354-0951-4, <http://link.aip.org/link/?APCPCS/1387/253/1>

Ladislau Matekovits, Aldo De Sabata, Mario Orefice, "Parametric study of a unit cell with elliptical patch for periodic structures with variable number of grounding vias", *Proc. of the Fourth European Conf. on Antennas and Propagation, EUCAP, Barcelona*, April 12-16, Spain, pp. 1-3, 2010, ISBN: 978-847653472-4, <http://www.eucap2010.org/>

Ladislau Matekovits, Aldo De Sabata, Karu P. Esselle, "Effects of the Biasing Network in a Parallel Plate Waveguide Periodic Unit Cell Featuring Switched Electromagnetic Band Gap", *Proceedings of Asia-Pacific Microwave Conference 2010*, Yokohama, Japan, Dec. 7-10, pp. 1122-1125, ISBN 978490233921 5, <http://www.apmc2010.org/>

Aldo De Sabata, Ladislau Matekovits, Andrei Silaghi, Ulrich Rhode, Marius Silaghi, "Investigation on surface waves related properties of some periodic structures", *Proc. of the 12th International Conference on Microwave and High Frequency Heating, Ampere 2009*, 7-10 Sept. 2009, Karlsruhe, Germany, pp. 364-367, 2009.

Cosmin Sinescu, Meda Negrutiu, Dana Pop, Lavinia Cuc, Aldo De Sabata, Radu Negru, Mihai Hluscu, Mihai Rominu, Corina Marcauteanu, Eniko Demjan, Adrian Bradu, Iulian Antoniac, George Dobre, Adrian Podoleanu, "The importance of holograms in dentistry", *Conference on Holography - Advances and Modern Trends, Prague, Czech Republic, Apr 21-23, 2009, in Holography: Advances*

and Modern Trends, Book Series: *Proceedings of SPIE*, Vol. 7358, Article Number: 73580J, DOI: 10.1117/12.821545, Published: 2009

Aldo De Sabata, Liviu Toma, Septimiu Mischie, "Two-step Pisarenko harmonic decomposition for single tone frequency estimation", 7th WSEAS/IASME Int. Conf. on Power Systems, High Voltages, Electric Machines, Venice, Italy, Nov. 21-23, pp. 243-246, 2007.

Aldo De Sabata, "Sampling theorem for multidimensional, multiband signals", *WSEAS Transactions on Signal Processing*, Issue 3, vol. 1, dec. 2005, pp. 458-461, ISSN 1790-5022 (apărută și în 2005 *WSEAS int. Conf. on Dynamical Systems and Control*, Venice, Italy, 2005, pp. 405-408)

Géczi Gábor, Sembery Péter, Váczy Gábor, Aldo De Sabata, "Termények dielektromos állandójának meghatározása 2.45 GHz frekvencián, csötápvonalas módszerek segítségével", *Műszaki Kémiai Napok '01, Veszprém, Április 24-26*, pp. 82-87, 2001, ISBN 963-00-6467-7.

Ioan De Sabata, Marian Greconici, Aldo De Sabata, "Force that acts on a rotor with alternating poles", *Proc. of 11th Int. Symp. on Power Electronics*, Oct. 31-Nov. 2, Novi Sad, Yugoslavia, pp. 337-340, 2001

Aldo De Sabata, Ioan De Sabata, "Some Curiosa as Opportunities for Making More Attractive Lectures in Electrical Engineering", *Proc. of the 10th EAIEE Annual Conference, Capri, Italy*, pp. 249-251, 1999.

Aldo De Sabata, "Real Time Adaptive Sampling for Piecewise Ploynomial Signal Reconstruction", *Proc. on the Int. AMSE Conf. "Signals and Systems"*, Warsaw, Poland, July 15-17, pp. 119-129, 1991.

Aldo De Sabata, "The Sampling Rate for the Hermite Polynomial Interpolation of Band-Limited Signals", *Proc. on the Int. AMSE Conf. "Signals and Systems"*, Warsaw, Poland, July 15-17, pp. 109-118, 1991.

5.2. Conferințe internaționale în România

Aldo De Sabata, Ladislau Matekovits, "On scaling properties of the dispersion diagram of a multi-scale printed surface embedded ia a parallel-plate waveguide", *IEEE 7th International Symp.on Appl. Computational Intelligence and Informatics, SACI 2012*, May 24-26, Timișoara, pp. 411-414, 2012.

Aldo De Sabata, Ladislau Matekovits, "Characteristics of a switchable metamaterial based parallel plate waveguide derived by electromagnetic simulation", *6th IEEE International Symposium on Applied Computational Intelligence and Informatics (SACI)*, May 28-29, Timișoara, Romania, DOI: 10.1109/SACI.2011.5872990, ISSN, pp. 151-154, <http://www.ac.upt.ro/saci2009/index.RO.html>, 2011.

Aldo De Sabata, Ladislau Matekovits, Ildiko Peter, "Electronically switched multiband high-impedance surfacewith circular and annular patches", *International Symposium on Signals, Circuits and Systems, ISSCS 2011*, June 30-July 1, Iași, Romania, DOI: 10.1109/ISSCS.2011.5978759, ISSN: 978-1-61284-943-0/11/\$26.00, pp. 1-4, 2011, <http://scs.etc.tuiasi.ro/isscs2011>.

Aldo De Sabata, Ladislau Matekovits, "Design charts for grounded, elliptically shaped microstrip periodic structures featuring electromagnetic band-gap", *8th International Conference on Communications (COMM)*, București, Romania, June 10-12, pp. 239-242, ISBN 978-1-4244-6362-6, DOI: 10.1109/ICCOMM.2010.5509010, <http://comm2010.ncit.pub.ro/>

Aldo De Sabata, Ladislau Matekovits, "Numerical exploration of filtering properties of some switched high impedance surfaces", *9th International Symposium on Electronics and Telecommunications*

ISETC, Timișoara, Romania, Nov. 11-12, pp. 73-76, 2010, ISBN 978-1-4244-8458-4, DOI 10.1109/ISETC2010.5679246, <http://www.etc.upt.ro/other/isetc2010/home.php>

Aldo De Sabata, Liviu Toma, "Analysis of an Algorithm for Real Tone Frequency Estimation", *Proc. of the Int. Symp. on Signals, Circuits and Systems ISSCS 2009*, July 9-10 2009, vol. 1, pp. 113-116, ISBN 978-1-4244-3784-9

Aldo De Sabata, Liviu Toma, "Application of Bandpass Filtering in Real Tone Frequency Estimation", *5th International Symposium on Applied Computational Intelligence and Informatics* May 28–29, 2009 – Timișoara, Romania, pp. 429-433, ISBN: 978-1-4244-4478-6

Ioan Luminosu, Aldo De Sabata, Coleta De Sabata, "Thermally Autonomous Residence in the Western Part of Romania", *5th International Symposium on Applied Computational Intelligence and Informatics (SACI)*, May 28–29, 2009 – Timișoara, Romania, pp. 229-234, DOI: 10.1109/SACI.2009.5136247, ISBN: 978-1-4244-4478-6

Liviu Toma, Aldo De Sabata, Robert Pazsitka, Ladislau Matekovits, "A Hybrid Single Tone Frequency Estimator, *Bul. St. Univ. "Politehnica" din Timisoara*", *Bul. St. Univ. "Politehnica" din Timisoara, Trans. on Electronics and Telecomm., International Symposium on Electronics and Telecommunications, ISETC2008*, Tom 53(67), Fasc. 2, 2008, pp. 50-52, ISSN 1583-3380.

Aldo De Sabata, Liviu Toma, Robert Pazsitka, Ladislau Matekovits, "Real single tone frequency estimation by PHD and filtering", *Bul. St. Univ. "Politehnica" din Timisoara, Trans. on Electronics and Telecomm. International Symposium on Electronics and Telecommunications, ISETC2008*, Tom 53(67), Fasc. 2, pp 53-54, ISSN 1583-3380.

Alimpie Ignea, Aldo De Sabata, "Hysteresis Distorsions for Two-Tone Signals", *Proc. of 15th IMEKO Symposium on Novelties in Electrical Measurements and Instrumentation*, Iași, România, sept. 2007, pp. 61-63, ISBN 978-973-667-260-6, 978-973-667-261-3.

Ladislau Matekovits, Aldo De Sabata, Paola Pirinoli, Mario Orefice, "Broadband measurement of the refractive index using microstrip lines", *Bul. Șt. Univ. "Politehnica" din Timișoara, Trans. on Electronics and Telecomm., Int. Symp. ETc 2006, Timișoara*, Tom 51(65), Fasc. 1, pp. 44-48, 2006, ISSN 1583-3380

Aldo De Sabata, Ladislau Matekovits, "Scattering parameters for symmetrical networks", *Bul. Șt. Univ. "Politehnica" din Timișoara, Trans. on Electronics and Telecomm., Int. Symp. ETc 2004, Timișoara*, Tom 49(63), Fasc. 2, pp. 317-322, 2004, ISSN 1583-3380.

Aldo De Sabata, "Generalized derivative band-pass sampling", *Bul. Șt. Univ. "Politehnica" Timișoara, Electronică și Telecom., Proc. of the Symp. on Electronics and Telecommunications "ETc 2002"*, Tom 47(61), fasc.1- 2, vol. I, pp. 168-170, 2002, ISSN 1224-6034.

Gabor Geczi, Paul Sembery, Aldo De Sabata, "Dielectric constant measurement for wheat", *Bul. Șt. Univ. "Politehnica" Timișoara, Tom 45(59), Fasc. 1, Proc. of the Symp. on Electronics and Telecommunications "ETc 2000"*, vol. II, pp. 198-200, 2000, ISSN 1224-6034.

Aldo De Sabata, Alimpie Ignea, "Sampling and Reconstruction of Sparse Images-An Information Theory Approach", *Proc. of the Int. Symp. on Electronics and Telecommunications (ETc 98)*, Timișoara, vol I, pp. 35-38, 1998.

Aldo De Sabata, "Sampling expansions for general band-pass signals", *Proc. of the Int. Conf. "Analysis and Numerical Computation of Solutions of Nonlinear Systems Modelling Physical Phenomena"*, West University of Timișoara and EOARD (USA), Ed. Mirton Timișoara, pp. 494-500, 1997, ISBN 973-578-267-7

Aldo De Sabata, "Undersampling and Reconstruction of Finite-Duration Signals through Hilbert Transform", *Proc. of Int. Symp. on Signals, Circuits and Systems, Iași, Nov. 4-5*, pp. 140-143, 1993.

Aldo De Sabata, "Undersampling Finite-Duration Signals through Multilinear Filtering", *Proc. of Int. Symp. on Signals, Circuits and Systems, Iași, Nov. 4-5*, pp. 136-139, 1993

6. Alte publicații în periodice

Aldo De Sabata, Ladislau Matekovits, Ulrich L. Rhode, Marius A. Silaghi, "Multiband passive filter built with metamaterial in a parallel-plate waveguide", *Journal of Electrical and Electronics Engineering*, vol. 4, nr. 1, pp. 49-52, May, 2011, DOI ISSN 1844-6035 (Oradea, CNCSIS B+), <http://electroinf.uoradea.ro/reviste%20EEE/default.htm>

Aldo De Sabata, Ladislau Matekovits, "Parallel-plate waveguides based on metamaterials with fixed and electronically reconfigurable geometry", *Scientific Bulletin of "Politehnica" University of Timisoara, Transactions on Automatic Control and Computer Science*, Vol. 56(70), No. 4, pp. 161-166, Dec. 2011, ISSN 1224-600X, Copernicus, Viniti, CNCSIS B+.

Ioan Luminosu, Aldo De Sabata, Coleta De Sabata, Marius Silaghi, "Impact of Using Tracking Surfaces on Necessary Solar Radiation Collecting Area in Stock Raising Applications", *Journal of Electrical and Electronics Engineering*, vol. 4, no. 2, pp.61-64, 2011, ISSN 1844-6035 (Oradea, CNCSIS B+), <http://electroinf.uoradea.ro/reviste%20EEE/default.htm>

Aldo De Sabata, Ladislau Matekovits, "A New High Impedance Surface Featuring Several Electromagnetic Band-Gaps", *Bul. Șt. UPT, Seria Electronică și Telecomunicații, Trans. on Electronics and Telecommunications*, Tom 55(69), Fasc. 2, pp. 3-6,2010, ISSN 1583-3380, <http://shannon.etc.upt.ro/bulletin/index.html>

Ioan Luminosu, Aldo De Sabata, Coleta De Sabata, "Education in Solar Energy at the "Politehnica" University of Timișoara", *Banat Journal of Biotechnology*, I(2), pp. 83-87, 2010, ISSN 2068-4673 (Print), ISSN 2068-4738 (CDROM), <http://dse.usab-tm.ro/en/bjb.html>

Ioan Luminosu, Coleta De Sabata, Aldo De Sabata, "Operation model for a simple solar thermal installation", *Buletinul AGIR*, nr. 2-3, apr.-sept., pp. 93-97, 2010, ISSN 1224-7928.

Ioan Luminosu, Coleta De Sabata, Aldo De Sabata, Traian Jurca, "On the use of magnetic fluids in solar energy installations", *Buletinul AGIR*, anul XIV, nr. 2-3, pp. 66-69, apr.-sept. 2009, ISSN 1224-7928

Coleta De Sabata, Ioan Luminosu, Aldo De Sabata, Traian Jurca, "Cercetări experimentale și realizări industriale privind preîncălzirea bitumului cu ajutorul energiei solare", *Buletinul AGIR*, anul XIV, nr. 2-3, pp. 70-75, apr.-sept. 2009, ISSN 1224-7928

Ioan Luminosu, Aldo De Sabata, Coleta De Sabata, Mariana Nagy, "An energetic study of a small solar residence", *bul. PAMM*, cxii (BAM–2370), pp. 171-180, Budapesta, 2008, ISSN 0133-3526.

Ioan Luminosu, Aldo De Sabata, Coleta De Sabata, Mariana Nagy, "Statistics on the availability of solar energy on the 45th Northern parallel". *Bul. PAMM*, no. cxii (BAM – 2369), pp. 161-170, Budapesta, 2008, ISSN 0133-3526.

Coleta De Sabata, Ioan Luminosu, Aldo De Sabata, Traian Jurca, "Summer Climatization Based on Solar Energy: Considerations and Experimental Results", *Bul. St. Univ. "Politehnica" din Timisoara, Trans. on Mechanics*, Tom 53(67), Fasc. 3, pp. 65-68, 2008, ISSN 1224-6077

Liviu Toma, Aldo De Sabata, Septimiu Mischie, "A new two-step single tone frequency estimation algorithm", *International Journal of Circuits, Systems and Signal Processing*, Issue 2, vol. 1, pp. 105-108, 2007, ISSN 1998-0140, on line <http://www.naun.org/journals/circuitssystemsignal>

Coleta De Sabata, Ioan Luminosu, Aldo De Sabata, Alina Palea, "On the Design of a Solar, Partially Energetically Independent House in the Region of Banat", *Bul. St. Univ. "Politehnica" din Timisoara, Trans. on Mechanics*, Tom 52(66), Fasc. 4, pp. 82-87, 2007, ISSN 1224-6077

Ioan Luminosu, Coleta De Sabata, Aldo De Sabata, "Cercetări teoretice și experimentale asupra posibilității de realizare a unei case solare parțial autonome termoenergetic", *Revista AGIR*, anul XII, nr. 3, pp. 31-44, iul.-sept. 2007, ISSN 1224-7928.

Aldo De Sabata, Liviu Toma, Septimiu Mischie, "Closed-form variance formula of the rphd single-tone frequency estimator", *Facta Universitatis (Nis), Ser.: Elec. Energ.*, vol. 19, no. 3, Dec. 2006, pp. 453-464, ISSN 0353-3670

Aldo De Sabata, Alimpie Ignea, "Sampling expansions on lattices for multidimensional, multiband signals", *WSEAS Transactions on Signal Processing*, Issue 1, Vol. 2, Jan. 2006, pp. 60-66
ISSN 1790-5022.

Ioan De Sabata, Aldo De Sabata, "Thermodynamic derivation of the expressions of the force and energy in the maxwell-hertz theory", *Bul. Șt. Univ. "Politehnica" din Timișoara, Trans. on Power Engineering*, Tom 50(64), Fasc. 1,2, PP. 185-194, 2005, ISSN 1583-3380

Robert Pazsitka, Liviu Toma, Dan Stoiciu, Aldo De Sabata, "Derivation of the Sampling Theorem for Bandpass Signals", *Bul. Șt. Univ. "Politehnica" Timișoara, Electronică și Telecom.*, Tom 48(62), fasc. 2, pp. 14-15, 2003, ISSN 1583-3380

Ioan De Sabata, Aldo De Sabata, "O sinteză asupra acțiunilor ponderomotoare din lichide magnetice și două aplicații ale acestora", *Analele Universității din Oradea*, Fasc. Ing. Elect., pp. 64-73, 2001.

Bernhard Rothenstein, Aldo De Sabata, "Special Relativity with light signals but from Galilean postulate", *Hadronic J.*, vol. 23, Issue 6, pp. 607-617, Dec. 2000, ISSN 0162-5519.

Bernhard Rothenstein, Aldo De Sabata, "Relativistic Derivation of the Electric and Magnetic Fields of an Electric Point Charge and of a Line Charge Moving with a Constant velocity, Built on Retardation of Space-Time Coordinates", *Bul. Șt. Univ. "Politehnica" Timișoara, Matematică-Fizică*, Tom 44(58), Fasc. 1, pp. 38-43, 1999, ISSN 1224-6069.

Aldo De Sabata, Anton Policec, Diego Bravar, Paolo Giribona, "Partial Fourier MR imaging", *Bul. Șt. Univ. "Politehnica" Timișoara, Electrotehnică, Electronică și Telecomunicații*, Tom 43(57), Fasc. 1, pp. 191-198, 1998, ISSN 1583-3380.

Aldo De Sabata, Carmen De Sabata, "On the Discrete Fourier Transform for a Class of Digital Signals", *Bul. Șt. Univ. "Politehnica" Timișoara, Electrotehnică, Electronică și Telecomunicații*, Tom 42(56), Fasc. 1, pp. 105-110, 1997, ISSN 1583-3380.

Bernhard Rothenstein, Aldo De Sabata, "Relativistic Dynamics Via the Doppler Effect in the de Broglie Wave", *Bul. Șt. Univ. "Politehnica" Timișoara, Matematică-Fizică*, Tom 41(55), fasc. 2, pp. 81-87, 1996, ISSN 1224-6069.

Bernhard Rothenstein, Aldo De Sabata, Sorin Bălan, "Addition Law of Relativistic Velocities: An Uncommon Way to Special Relativity", *Analele Univ. de Vest, Timișoara, seria Fizică*, no. 5, pp. 3-13, 1996.

Bernhard Rothenstein, Aldo De Sabata, Sorin Bălan, Erwin Lovasz, "Doppler effect in a spherical wave", *Bul. Șt. Univ. "Politehnica" Timișoara, Matematică-Fizică*, Tom 41(55), Fasc. 1, pp. 95-102, 1996, ISSN 1224-6069.

Aldo De Sabata, "Sampling Expansions for Harmonic Limited, Multiband Signals", *Bul. Șt. Univ. "Politehnica" Timișoara, Electrotehnică, Electronică și Telecomunicații*, Tom 41(55), Fasc. 1, vol. II, pp. 29-34, 1996.

Aldo De Sabata, "Gap sampling series for finite energy signals", *Bul. Șt. Univ. "Politehnica" Timișoara, Electrotehnică, Electronică și Telecomunicații*, Tom 40(54), pp. 121-126, 1995.

Aldo De Sabata, "Finite gap sampling expansions", *Bul. Șt. Univ. "Politehnica" Timișoara, Electrotehnică, Electronică și Telecomunicații*, Tom 40(54), , pp. 115-120, 1995.

Aldo De Sabata, Claude Iung, Jean-François Aubry, "A variable-scale DWT", *Proc. of the Int. Symp. on Electronics and Tech. Informatics*, Timișoara, sept. 29-30, vol. III, pp. 43-49, 1994.

Alimpie Ignea, Aldo De Sabata, "A New Echo Signal Processing Method for Ultrasonic Distance Measurement", *Buletinul Științific al Universității Tehnice Timișoara, Electrotehnică, Electronică și Telecomunicații*, Tom 38(52), pp. 183-186, 1993.

Aldo De Sabata, "Adaptive Sampling of Signals with Additive Noise", *Rev. Acad. Th. Mil., număr special*, anul III, pp. 26-30, 1993.

Aldo De Sabata, "Aproximarea derivatei în cazul interpolării Hermite a semnalelor de bandă limitată", *Analele Univ. Oradea, fasc. Ing. Elect.*, pp. 172-179, 1993.

Aldo De Sabata, "O generalizare a teoremei lui Papoulis", *Analele Univ. Oradea, fasc. Ing. Elect.*, pp. 167-171, 1993.

7. Participări la conferințe naționale

Ioan Luminosu, Aldo De Sabata, Coleta De Sabata, Traian Jurca, "Educație în Energie Solară la Universitatea "Politehnica" din Timișoara", *Știință și Inginerie, A X-a Conferință Națională Multidisciplinară "Profesorul Dorin Pavel – fondatorul hidroenergeticii românești"*, vol. 17, pp. 525-532, 2010, Ed. AGIR, ISSN 2067-7138.

Ioan Luminosu, Aldo De Sabata, Coleta De Sabata, "Aplicații ale utilizării energiei solare la Universitatea "Politehnica" din Timișoara", *Seminar tematic în cadrul expoziției "Energia Viitorului"*, Timișoara, 110 slide-uri, 2009.

Ioan Luminosu, Aldo De Sabata, Coleta De Sabata, Traian Jurca, "Simularea numerică a funcționării unui boiler solar în condiții cvasireale", *"Știință și Inginerie"*, vol. 14, *Lucrările celei de-a VIII-a Conferințe naționale multidisciplinare - cu participare internațională - "Profesorul Dorin Pavel - fondatorul hidroenergeticii românești"*, Sebeș, 30-31 mai 2008, pp. 121-128, Ed. Agir, București, 2008, ISBN 973-8130-82-4, 978-973-720-198-0

Aldo De Sabata, Afilon Heler, Ioan Turcu, "12-Bit Data Acquisition System ", *Simp. național de Calculatoare și Conducere Automată a Proceselor*, Timișoara, vol. I, pp 23-26, 1988.

Zorica Turcu, Mirela Peșan, Ioan Turcu, Aldo De Sabata, Liviu Șoflete, "Computer Cotrolled Measuring System for Delta Ferrite Contents in Austenitic Stainless Steel", *Simp. național de Calculatoare și Conducere Automată a Proceselor*, Timișoara, vol. I, pp 157-160, 1988.

Aldo De Sabata, "Metodă de eşantionare adaptivă a semnalelor în vederea reconstrucţiei lor prin interpolare liniară", *Vol. ses. com. a tinerilor absolvenţi, IPTV Timișoara*, pp. 144-147, 1988.

Aldo De Sabata, "Metodă de eşantionare adaptivă a semnalelor în vederea reconstrucţiei lor prin interpolare cu funcţii spline cubice", *Vol. ses. com. a tinerilor absolvenţi, IPTV Timișoara*, pp. 138-143, 1988.

Radu Munteanu, Aldo De Sabata, "Utilizarea unui modul de recunoaştere a vorbirii în comanda unui calculator personal", *ICSITE-"Realizări în domeniul Electronicii Profesionale"*, Bucureşti, vol. III, pp. VII.66-VII.69, 1987.

Anton Policec, Radu Munteanu, Aldo De Sabata, Ştefan Pitrop, "Studiu asupra utilizării unui modul de recunoaştere a vorbirii în recunoaşterea unui set de cuvinte în limba română", *Al 7-lea simpozion naţional de Tehnologie Electronică şi Fiabilitate*, Herculane, pp. 168-171, 1987.

Aldo De Sabata, Radu Munteanu, "Comanda prin voce a unui sistem cu microprocesor", *Vol. ses. com. a tinerilor absolvenţi, IPTV Timișoara*, pp. 96-100, 1986.

Radu Munteanu, Aldo De Sabata, "Comanda electrică pentru sisteme cu microprocesor", *Vol. ses. com. a tinerilor absolvenţi, IPTV Timișoara*, pp. 101-104, 1986.

Antoaneta Fecker, Aldo De Sabata, Ovidiu Lipan, "Solarimetre fotovoltaice cu afişaj numeric", *Vol. celei de a XXI-a sesiuni naţionale de Instalaţii în Construcţii*, Bucuresti, 1986.

Aldo De Sabata, Ovidiu Lipan, "Solarimetre cu afişaj numeric", *A XX-a sesiune naţională de Instalaţii în Construcţii, Sinaia*, vol. II, pp. 726-730, 1985.

8. Note de curs

Antennas and Wave Propagation, intranet.etc.upt.ro, 85 p., 2011

Instrumentaţie Optoelectronică şi de Înaltă Frecvenţă, intranet.etc.upt.ro, 100 p., 2010

Tehnica Frecvenţelor Înalte (română şi engleză), intranet.etc.upt.ro, 100 p., 2010

Dispozitive Electronice şi Optoelectronice, intranet.etc.upt.ro, 200 p., 2010

Electronică Optică pentru Energie Solară, intranet.etc.upt.ro, 70 p., 2010

S Parameters, suport de curs, Politecnico di Torino, www.polito.it, 70 p., 2009

Laseri şi Aplicaţii în Medicină, intranet.etc.upt.ro, 50 pag., 2008.

20.05.2012

Aldo De Sabata