

LIST OF PUBLICATIONS – 1 October 2008

DOCTORAL THESIS

Analysis and Simulation of Some Processes in Neuromuscular System, appreciated with distinction **MAGNA CUM LAUDAE**, Politehnica University of Bucharest, Specialization Electronics and Telecommunication (170 pages).

PAPERS PUBLISHED IN SPECIALIZED INTERNATIONAL MAGAZINES

1. Witte H., **Ungureanu M.**, Ligges C., Hemmelmann D., Wüstenberg T., Reichenbach J., Astolfi L., Babiloni F., Leistritz L. - Signal informatics as an advanced integrative concept in the framework of medical informatics: New trends demonstrated by examples derived from neuroscience, *Methods of Information in Medicine*, 1/2009, pp. 1-11, ISSN 0026-1270, impact factor 0.97/2005, in press (ISI), 11 pages, 3 col.
2. **Ungureanu G. M.**, Bergmans J. W. M., Oei S. G., Ungureanu Al., Wolf W. - Foetal ECG extraction from abdominal signals: comparison and evaluation of existing methods, *Biomed. Tech.*, ISSN 0013-5585, impact factor 0.757/2005, in press (ISI), 11 pages, 2 col.
3. **Ungureanu G. M.**, Bergmans J.W.M., Oei S. G., Ungureanu Al., Wolf W. - Maternal ECG cancellation in abdominal signals: application of the event synchronous canceller approach, *Computers in Biology and Medicine*, ISSN 0010-4825, impact factor 0.518/2005, in press (ISI).
4. Weiss T.**, Hesse W.**, **Ungureanu M.**, Hecht H., Leistritz L., Witte H., Miltner W. H. R. - How do brain areas communicate during the processing of noxious stimuli? An analysis of laser evoked event-related potentials using the Granger Causality Index, *J. Neurophysiology*, 2008 May, 99(5), pp. 2220-2231, ISSN 0022-3077, impact factor 3.935/2005, 12 pages, 2 col.
5. **Ungureanu M.**, Bergmans J. W.M., Oei S. Guid, Strungaru R. - Fetal ECG Extraction during Labor using an Adaptive Maternal Beat Subtraction Technique, in *Biomedizinische Technik*, February 2007, 52, pp. 56–60, ISSN 0013-5585, impact factor 0.889, ISI indexed, 6 pages, 2 col.
6. **Ungureanu M.**, Wolf W. – Basic Aspects Concerning the Event-Synchronous Interference Canceller, *IEEE Trans. Biomed. Eng.*, 53 (11), November 2006, pp. 1-8, ISSN 0018-9294, impact factor 2.302/2006, ISI indexed, 8 pages, 2 col.
7. **Ungureanu M.**, Bigan C., Strungaru R., Lazarescu V. – Independent Component Analysis Applied in Biomedical Signal Processing, *Measurement Science Review, Measurement in Biomedicine*, on-line edition (Journal of the Institute of Measurement Science SAS), <http://www.measurement.sk>, vol. 4, Section 2, 2004, pp. 1-8, ISSN 1335-8871, BDI (Copernicus International), 8 pages, 1 col., BDI (Copernicus Int.)
8. **Ungureanu M.**, Strungaru R., Lazarescu V. - Myoelectric Signal Classification using Neural Networks, *Biomedizinische Technik*, Vol. 43(3), 1998, pp. 87-90, ISSN 0939-4990, BDI (Medline) (ISI with ISSN 0013-5585, impact factor 0.889 in 2005), 4 pages, 2 col.

PAPERS PUBLISHED IN SPECIALIZED NATIONAL MAGAZINES

9. Camelia Dutescu, Dragos Taralunga, Hadi Rahimian, Alexandra Ungureanu, Rodica Strungaru, Ilinca Gussi, **Mihaela Ungureanu**, Analiza morfologica continua a electrocardiograamei fetale extrasa din semnale inregistrate transabdominal- avantaje si limitari, poster sustinut la a IX a Conferinta Nationala a Societatii Romane de Obstetrica Ginecologie, Cluj septembrie 2008, rezumat in *Obstetrica si Ginecologia (Rev Soc Rom de Obstet Ginecol)*, sept 2008, vol LVI, supl, pp 80-91 (appreciated by CNCSIS (C), code 254)
10. Zevri S. S., Strungaru R., **Ungureanu G. M.**, Time-Frequency Analysis for EEG Classification in Motor Imagery, *Proc. 1st National Symposium on e-Health and Bioengineering, EHB 2007*, 16th November 2007, Iasi, Romania, printed in *Revista medico-chirurgicala a societatii de medici si naturalisti Iasi* (appreciated by CNCSIS (B), code 158), pp. 203-206, ISSN 0048-7848.
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13. Ungureanu Al., **Ungureanu M.**, Strungaru R., Cososchi St. - Detection of Heart Rate Variations using Time-Frequency Analysis. Proc.: 6th National Symposium on Electronic Equipments and Artificial Intelligence - Applications in medicine - EEAI 2006, 30 June - 1 July 2006, Pitesti, Romania, 6 pages, 1 col., printed in Scientific Bulletin of University of Pitesti. Series: Electronics and Computer Science (appreciated by CNCSIS* (C), code 404), No. 6, Vol. 2, 2006, pp. 36-40, ISSN 1453-1119.

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15. Cososchi St., Strungaru R., **Ungureanu M.** - Comparison of LDA and RBF-NN in EEG Features Classification for Motor Imagery - Scientific Bulletin of University POLITEHNICA Timisoara. Series: Electronics and Telecommunications, Trans. on Electronics and Communications, (appreciated by CNCSIS* (B), code 252), Special number dedicated to the Proc.: International Symposium on Electronics and Telecommunications, ETc 2006, Seventh Edition, 21-23 September 2006, Timisoara, Romania, Tom 51(65), Fascicola 1, pp. 59-63, ISSN 1583-3380, 5 pag., 2 col.

16. Cososchi St., Strungaru R., **Ungureanu M.**, Pasca S. - Performance of LDA, BP-NN and RBF-NN Applied in Motor Imagery - "Revista de Inventica" - Romanian Journal for Creativity in Engineering and Technology - Research and Education Reports, (appreciated by CNCSIS* (D), code 245), Special Issue ECIT 2006, No. 53, Vol. X, pp. 3-11, ISSN 1210-3084, 9 pages, 1 col. This article was also published in Proc.: 4th European Conference on Intelligent Systems and Technology, Iasi, Romania, 21-23 September 2006, CD with ISBN(10) 973-730-246-X , ISBN(13) 978-973-730-246-5, 11 pages, 1 col.

17. **Ungureanu G. M.**, Strungaru R., Cososchi St. and Ungureanu Al. – Înlăturarea sforăitului în PSG folosind un filtru de rejecție – Revista de aparatură medicală "RAM MEDICA" (appreciated by The National Medical Council – Colegiul Medicilor din Romania - CMR), nr. 9/September, pp. 22-23, 2 pages, 3 col. and nr. 10/October, pp. 8-9, 2 pages, 3 col., (Ed. MEDRO), 2004

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21. Cososchi St., **Ungureanu M.**, Strungaru R., Moraru L. – Fuzzy and Neural Microcontrollers Performances, Scientific Bulletin of University of Pitesti. Series: Electronics and Computer

Science. Special Number dedicated to The National Symposium “Electrical Equipments and Artificial Intelligence”, vol. 1, 2004, ISSN 1453-1119, pp. 58-64, 6 pages, 2 col., appreciated by CNCSIS* (D).

22. **Ungureanu M.**, Bigan C., Strungaru R., Lazarescu V. – Spectral Methods for EMG Signal Processing and Analysis. Craiova Medicala, The magazine of the University of Medicine and Pharmacy of Craiova (Craiova Medicala), Special Issue: Proceedings of 1st MEDINF International Conference on Medical Informatics&Engineering, MEDINF2003, Craiova, Romania, October 8-11, 2003, pp. 222-225, ISSN 1454-6076, 4 pages, 1 col., appreciated by CNCSIS* (D).

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2 CHAPTERS AND PAPERS IN A SPECIALIZED BOOK PUBLISHED ABROAD

26. **Ungureanu G.M.**, Strungaru R., Cososchi St. and Ungureanu Al. - Independent Component Analysis Applied in Motor Imagery, in: A. Reichert, G. Mihalas, L. Stoicu-Tivadar, St. Schulz, R. Engelbrecht - *Integrating Biomedical Information: from e-Cell to e-Patient*, Proceedings of the European Federation for Medical Informatics - Special Topic Conference, April 6-8, 2006, Timisoara, Romania, IOS Press, 2006, pp. 233-235, ISBN 3-89838-072-6 (Aka), ISBN 1-58603-614-9 (IOS Press), ISBN 973-625-303-1 (Ed. Politehnica), 3 pages, 1 col

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33. Țarălungă D., Wolf W., Strungaru R., **Ungureanu M.**, Abdominal Signal Processing: maternal ECG removal by combining ESC and ICA methods, Proc. European Medical and Biological Engineering Conference – ECIFMBE2008, IFMBE2008, 23 - 27 November 2008, Antwerp, Begium, vol. 22, pp. 1196-1199, ISBN 978-3-540-89207-6, ISSN 1680-0737, 4 pages, 2 col.

34. Cornita V., Strungaru R., Pasca S., **Ungureanu M.G.**, Perianu F. - Medical Image Database Kernel with a NN Selection Driven Image Retrieval Algorithm: poster presentation in Session 1, Exploratory Workshop – BIOINGTEH, September 18-20, 2008, pp. 23, ISSN 1844-8321.

35. Oprea A., Pasca S., **Ungureanu M. G.**, Strungaru R. - A Novel Approach in Mammogram Segmentation: poster presentation in Session 2, Exploratory Workshop – BIOINGTEH, September 18-20, 2008, pp. 45-46, ISSN 1844-8321.

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41. Țarălungă D. D., Wolf W., Strungaru R., **Ungureanu G. M.** - Noninvasive Fetal Monitoring Based on Abdominal Signals: poster presentation in Session 2, Exploratory Workshop – BIOINGTEH, September 18-20, 2008, pp. 43-44, ISSN 1844-8321.

42. Oprea A. E., Strungaru, R., **Ungureanu M.**, A Self Organizing Map Approach to Breast Cancer Detection, 30th Annual International IEEE EMBS Conference, August 20-24, 2008, Vancouver, British Columbia, Canada, ISI and BDI (IEEE and Inspec), pp. 3032 - 3035, ISBN 978-1-4244-1815-2, ISSN 1557-170X, 4 pages, 2 col.

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53. Strungaru R., **Ungureanu M.**, Murri R., Pasquali C., Seidel K., Stanciu R., Datcu M. - Feature Extraction from Dermatological and Dental Image Databases, Proc.: 4th European Conference on Intelligent Systems and Technology, Iasi, Romania, 21-23 September 2006, CD with ISBN(10) 973-730-246-X, ISBN(13) 978-973-730-246-5, 9 pages, 1 col.
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