

A DSP-based laser scanner

Saar, Tõnis; Märtens, Olev BEC 2008 : 2008 International Biennial Baltic Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 345-348 : ill

A sampling multichannel bioimpedance analyzer for tissue monitoring

Min, Mart; Land, Raul; Märtens, Olev; Parve, Toomas; Ronk, Ants Proc. of the 26. Annual International Conference of the IEEE EMBS : September 1-5, 2004, San Francisco, California, USA 2004 / p. 902-905

AC measurement converters : analog and digital solutions

Märtens, Olev 2000 <http://www.ester.ee/record=b1707866+est>

AC measurements with digital signal processing

Märtens, Olev BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 121-122: ill

Acceleration data acquisition and processing system for structural health monitoring

Herranen, Henrik; Kuusik, Alar; Saar, Tõnis; Reidla, Marko; Land, Raul; Märtens, Olev; Majak, Jüri 2014 IEEE International Workshop On Metrology For Aerospace : May 29-30, 2014, Benevento, Italy : proceedings 2014 / p. 244-248 : ill

Acoustic spectrum analysis of genuine and counterfeit euro coins

Gavrijaševa, Alina; Märtens, Olev; Land, Raul Elektronika ir elektrotehnika = Electronics and electrical engineering 2015 / p. 54-57 : ill

Adaptively under sampled, circular histogram based image processing for rotation invariant coin detection

Mölder, Ago; Märtens, Olev; Saar, Tõnis BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 137-140 : ill

Adaptively undersampled image processing for fast multiline laser detection

Mölder, Ago; Märtens, Olev; Saar, Tõnis; Land, Raul 2013 IEEE 8th International Symposium on Intelligent Signal Processing (WISP 2013) : proceedings 2013 / p. 60-64 : ill [CD-ROM]

Adaptive-rate inductive impedance based coin validation

Märtens, Olev; Land, Raul; Gavrijaševa, Alina; Mölder, Ago 2011 IEEE 7th International Symposium on Intelligent Signal Processing (WISP) : Floriana, Malta, September 19-21, 2011 : proceedings 2011 / p. 122-125: ill

An ASIC for multifrequency bioimpedance analysis

Min, Mart; Holmström, Nils; Järverud, Karin; Land, Raul; Märtens, Olev; Parve, Toomas Proceedings of the XI International Conference on Electrical Bio-impedance : June 17-21, 2001, Oslo, Norway 2001 / p. 251-254 : ill

Antidictionary-based cardiac arrhythmia classification for smart ECG sensors

Duforest, Julien; Larras, Benoit; Frappe, Antoine; Deepu, John Deepu; **Märtens, Olev** 2022 IEEE International Symposium on Circuits and Systems (ISCAS) : proceedings 2022 / p. 414-418 : ill <https://doi.org/10.1109/ISCAS48785.2022.9937853> Conference Proceedings at Scopus Article at Scopus Article at WOS

Automatic detection of multisize pulmonary nodules in CT images : large-scale validation of the false-positive reduction step

Gupta, Anindya; Saar, Tõnis; Märtens, Olev; Le Moullec, Yannick Medical physics 2018 / p. 1135-1149 : ill
<https://doi.org/10.1002/mp.12746> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Automatic detection of real and imaginary parts of electrical impedance with single synchronous demodulation channel

Annus, Paul; Priidel, Eiko; Land, Raul; Metshein, Margus; Krivošei, Andrei; Min, Mart; Ratassepp, Madis; Märtens, Olev 8th European Medical and Biological Engineering Conference : Proceedings of the EMBEC 2020, November 29 - December 3, 2020 Portorož, Slovenia 2021 / p. 151-157 https://doi.org/10.1007/978-3-030-64610-3_18 Conference Proceedings at Scopus Article at Scopus

Binary signals in impedance spectroscopy

Min, Mart; Ojarand, Jaan; Märtens, Olev; Paavle, Toivo; Land, Raul; Annus, Paul; Rist, Marek; Reidla, Marko; Parve, Toomas Conference proceedings : ... Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Conference 2012 / p. 134-137 : ill

Capacitance measurement with MSP430 microcontrollers

Märtens, Olev; Pille, Siim; Reidla, Marko EDERC2014 : proceedings of the 6th European Embedded Design in Education and Research Conference, 11-12 September 2014, Milan, Italy 2014 / p. 260-263 : ill

Chirp signals in impedance spectroscopy

Min, Mart; Märtens, Olev; Land, Raul Book of abstracts : 16th International Conference on Electrical Bio-Impedance : 17th Conference on Electrical Impedance Tomography : ICEBI and EIT Stockholm, 19-23 June 2016 2016 / p. 72

Chirp-based impedance spectroscopy pf piezo-sensors

Saar, Tõnis; Märtens, Olev; Reidla, Marko; Ronk, Ants BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 339-342 : ill

Chirp-based piezo-impedance measurement

Saar, Tõnis; Reidla, Marko; Märtens, Olev; Land, Raul; Min, Mart; Herranen, Henrik Proceedings : WISP'2013, 8th IEEE International Symposium on Intelligent Signal Processing 2013 / [4] p. : ill

Classification and denoising of objects in TEM and CT images using deep neural networks = Objektide klassifitseerimine ja müratustamine TEM ja KT kujutistelt sügavate närvivõrkude abil

Gupta, Anindya 2018 <https://digi.lib.ttu.ee/i/?9954>

Coin recognition using line scan camera

Gavrijaševa, Alina; Märtens, Olev; Land, Raul; Reidla, Marko BEC 2014 : 2014 14th Biennial Baltic Electronics Conference : proceedings of the 14th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 6-8, 2014, Tallinn, Estonia 2014 / p. 161-164 : ill

Coin validation by electromagnetic, acoustic and visual features = Mündi valideerimine elektromagnetiliste, akustiliste ja visuaalseste tunnuste järgi

Gavrijaševa, Alina 2015 <https://digi.lib.ttu.ee/i/?22408> https://www.estet.ee/record=b4480613*est

Comparison of eddy current theory and Finite Element Method for metal evaluation

Gordon, Rauno; Märtens, Olev; Kolyshkin, Andrei Lecture notes on impedance spectroscopy : measurement, modeling and applications. Vol. 3 2012 / p. 41-45 : ill

Correlation between electrical bioimpedance and pressure waveform in radial artery and in mechanical pulsating pipe system

Metshein, Margus; Annus, Paul; Land, Raul; Rist, Marek; Min, Mart; Märtens, Olev 2020 IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2020), May 25-29, 2020, Dubrovnik, Croatia : proceedings 2020 <https://doi.org/10.1109/I2MTC43012.2020.9128972>

Cross-correlation-based image matching of coins

Gavrijaševa, Alina; Mölder, Ago; Märtens, Olev Kyrkou, C.; Theocharides, T. BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 319-322 : ill

Cross-correlation-based image matching of coins

Gavrijaševa, Alina; Mölder, Ago; Märtens, Olev Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK kuuenda aastakonverentsi artiklite kogumik : 3.-5. oktoobril 2012, Laulasmaa 2012 / p. 17-20 : ill

Design and manufacturing of composite laminates with structural health monitoring capabilities

Herranen, Henrik; Majak, Jüri; Tšukrejev, Pavel; Karjust, Kristo; Märtens, Olev Procedia CIRP 2018 / p. 647-652 : ill <https://doi.org/10.1016/j.procir.2018.03.128> Conference Proceedings at Scopus Article at Scopus Article at WOS

Detection of pulmonary micronodules in computed tomography images and false positive reduction using 3D convolutional neural networks

Gupta, Anindya; Saar, Tõnis; Märtens, Olev; Le Moullec, Yannick; Sintorn, Ida-Maria International Journal of Imaging Systems and Technology 2019 / p. 327-339 : ill <https://doi.org/10.1002/ima.22373> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Determination of electrical conductivity of metal plates using planar spiral coils

Kolyshkin, Andrei; Kübarsepp, Toomas; Märtens, Olev; Pokatilov, Andrei Recent Advances in Systems : proceedings of the 13th International Conference of Systems 2009 / p. 545-550

Digital multichannel bioimpedance analyser : signal processing approaches

Ronk, Ants; Annus, Paul; Kuusik, Alar; Land, Raul; Märtens, Olev Proceedings of the 3rd European Medical & Biological Engineering Conference EMBEC'05 : November 20-25, 2005, Prague, Czech Republic 2005 / [4] p

A digital multichannel bioimpedance analyser : signal processing task and its solution

Annus, Paul; Kuusik, Alar; Land, Raul; Märtens, Olev; Ronk, Ants Proc. of the IEEE Instrumentation and Measurement Technology Conference : IMTC 2006 : Sorrento, Italy, April 24-27, 2006 2006 / p. 1405-1409 <https://doi.org/10.1109/IMTC.2006.328596>

Digital post-processing of the bio-impedance signal
Märtens, Olev; Märtens, Hannes; Min, Mart; Parve, Toomas; Ronk, Ants Proceedings of X International Conference on Electrical Bio-Impedance : ICEBI'98 : 5-9 April 1998, Barcelona 1998 / p. 445-448

Direct eddy current method for volumetric flaws of cylindrical shape
Koliškina, Valentina; Kolyshkin, Andrei; **Gordon, Rauno; Märtens, Olev** ECCOMAS Congress 2016 : VII European Congress on Computational Methods in Applied Sciences and Engineering : proceedings. Vol. 1 2016 / p. 7659-7665 : ill
<https://www.eccomas2016.org/proceedings/pdf/5264.pdf>

DSP-based AC measurement unit

Märtens, Olev Proceedings of the 1999 Finnish Signal Processing Symposium FINNSIG'99 : May 31, 1999, University of Oulu, Finland 1999 / p. 247-251

DSP-based device for multi-frequency bio-impedance measurement

Märtens, Olev Medical & biological engineering & computing 1999 / Suppl. 1, Proceedings of the 11th Nordic-Baltic Conference on Biomedical Engineering : NBCBME'99 : June 6-10, 1999, Tallinn, Estonia, p. 165-170

A DSP-based EBI, ECG and PPG measurement platform

Abdullayev, Anar; Rist, Marek; Märtens, Olev; Metshein, Margus; Larras, Benoit; Frappe, Antoine; Gautier, Antoine; Min, Mart; John, Deepu; Cardiff, Barry; Krivosei, Andrei; Annus, Paul IEEE transactions on instrumentation and measurement 2023 / art. 2007808, 8 p <https://doi.org/10.1109/TIM.2023.3320771>

A DSP-based impedance measurement device

Abdullayev, Anar; Märtens, Olev; Rist, Marek; Metshein, Margus; Min, Mart; Annus, Paul 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 5 l. <https://doi.org/10.1109/BEC56180.2022.9935588>

DSP-based power-quality monitoring device

Märtens, Olev; Trampärk, Harri; Liimets, Aivar; Nobel, Peter; Veskimeister, Andres; Järvalt, Aldur WISP2007 proceedings : 5th IEEE International Symposium on Intelligent Signal Processing : Alcala de Henares, Madrid (Spain), October 3-5, 2007 2007 / [5] p <https://ieeexplore.ieee.org/document/4447591>

DSP-based RMS measurement converter

Märtens, Olev Telekommunikatsioon '98 : rahvusvahelise telekommunikatsioonipäeva konverentsi ettekanne materjalid, 15. mai 1998 1998 / lk. 66-72: ill

ECG classification with event-driven sampling

Saeed, Maryam; **Märtens, Olev; Larras, Benoit; Frappe, Antoine; John, Deepu; Cardiff, Barry** IEEE Access 2024 / p. 25188-25199
<https://doi.org/10.1109/ACCESS.2024.3364115>

Eddy current corrosion measurement of steel

Märtens, Olev; Land, Raul; Min, Mart; Rist, Marek; Ferenets, Marju; Käasper, Andres International Workshop on Impedance Spectroscopy : IWIS 2016 : September 26-28, 2016, Technische Universität Chemnitz, Germany : abstract book 2016 / p. 40-41 : ill

Eddy current corrosion measurement of steel

Märtens, Olev; Land, Raul; Min, Mart; Rist, Marek; Ferenets, Marju; Käasper, Andres Impedance spectroscopy : advanced applications : battery research, bioimpedance, system design 2018 / p. 125–134 : ill <https://doi.org/10.1515/9783110558920-012>

Eddy current testing models for the analysis of corrosion effects in metal plates

Koliškina, Valentina; Kolyshkin, Andrei; **Gordon, Rauno; Märtens, Olev** 19th European Conference on Mathematics for Industry : June, 13-17, 2016, Santiago de Compostela (Spain) : book of abstracts 2016 / p. 200 <http://dx.doi.org/10.15304/cc.2016.968>

Eddy current validation of Euro-coins

Gordon, Rauno; Märtens, Olev; Land, Raul; Min, Mart; Rist, Marek; Gavrijaševa, Alina; Pokatilov, Andrei; Kolyshkin, Andrei Lecture notes on impedance spectroscopy : measurement, modeling and applications. Vol. 3 2012 / p. 47-63 : ill

Elektroonsed mõõtmised inseneerias : [kõrgkooliõpik]

Märtens, Olev 2022 <https://digikogu.taltech.ee/et/item/205a1fc3-4743-4c50-9f0e-c13ce9b0649e>

Elektroonsed mõõtmised inseneerias : [kõrgkooliõpik]

Märtens, Olev 2023 https://www.estet.ee/record=b5557611*est

Embedded ICG-based stroke volume measurement system : comparison of discrete-time and continuous-time architectures

Gautier, Antoine; Larras, Benoit; **Märtens, Olev; John, Deepu; Frappe, Antoine** IEEE International SOC Conference 2022 / p. 46-51
<https://doi.org/10.1109/SOCC52499.2021.9739386>

Evaluation of level-crossing ADCs for event-driven ECG classification

Saeed, Maryam; Wang, Qingyuan; **Märtens, Olev** IEEE Transactions on Biomedical Circuits and Systems 2021 / p. 1129-1139
<https://doi.org/10.1109/TBCAS.2021.3136206> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Event-driven ECG classification using an open-source, LC-ADC based non-uniformly sampled dataset

Saeed, Maryam; Wang, Qingyuan; **Märtens, Olev**; Larras, Benoit; Frappe, Antoine; Cardiff, Barry; John, Deepu 2021 IEEE International Symposium on Circuits and Systems (ISCAS), Daegu, Korea May 22-28, 2021 : proceedings 2021 / 5 p
<https://doi.org/10.1109/ISCAS51556.2021.9401333> Conference Proceedings at Scopus Article at Scopus Article at WOS

Event-driven ECG classification using functional approximation and Chebyshev polynomials

Saeed, Maryam; **Märtens, Olev**; Larras, Benoit; Frappe, Antoine; John, Deepu; Cardiff, Barry 2022 IEEE Biomedical Circuits and Systems Conference (BioCAS), 13-15 Oct. 2022 2022 / p. 595-599 <https://doi.org/10.1109/BioCAS54905.2022.9948612>

Experimental modal analysis of maritime composite panel

Gavrijaševa, Alina; **Märtens, Olev**; Land, Raul; Saar, Tõnis; Herranen, Henrik; Majak, Jüri; Reidla, Marko; Kuusik, Alar BEC 2016 : 2016 15th Biennial Baltic Electronics Conference : proceedings of the 15th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 3-5, 2016, Tallinn, Estonia 2016 / p. 143-146 : ill http://www.ester.ee/record=b2150914*est

Extraction of the variable width laser line

Mölder, Ago; **Märtens, Olev**; Saar, Tõnis; Land, Raul BEC 2014 : 2014 14th Biennial Baltic Electronics Conference : proceedings of the 14th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 6-8, 2014, Tallinn, Estonia 2014 / p. 157-160 : ill

Fast impedance spectroscopy of piezosensors for structural health monitoring

Märtens, Olev; Saar, Tõnis; Min, Mart; Land, Raul; Reidla, Marko Elektronika ir elektrotehnika = Electronics and electrical engineering 2010 / 7, p. 31-34 : ill

Fast precise eddy current measurement of metals

Märtens, Olev; Land, Raul; Min, Mart; Rist, Marek; Annus, Paul; Pokatilov, Andrei 2018 IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2018) : proceedings 2018 / 5 p. : ill <https://doi.org/10.1109/I2MTC.2018.8409781>

Feasibility of utilizing air gapped toroidal magnetic cores for detecting pulse wave in radial artery

Metshein, Margus; Pesti, Ksenija; Min, Mart; Annus, Paul; **Märtens, Olev** 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 5 p. : ill <https://doi.org/10.1109/BEC49624.2020.9277197>

Feasibility study : a DM3730-based data acquisition and processing solution

Mölder, Ago; Reidla, Marko; **Märtens, Olev**; Land, Raul EDERC 2012 : proceedings of the 5th European DSP in Education & Research Conference : 13-14 September 2012, Amsterdam, The Netherlands 2012 / p. 58-61

Fiducial point estimation solution for impedance cardiography measurements

Märtens, Olev; Metshein, Margus; Abdullayev, Anar; Larras, Benoit; Frappe, Antoine; Gautier, Antoine; Saeed, Maryam; John, Deepu; Cardiff, Barry; Krivošei, Andrei; Annus, Paul; Rist, Marek 2022 IEEE International Instrumentation and Measurement Technology Conference (I2MTC) 2022 / Code 180602 <https://doi.org/10.1109/I2MTC48687.2022.9806596> Conference Proceedings at Scopus Article at Scopus Article at WOS

FPGA-based 16-bit 20 MHz device for the inductive measurement of electrical bio-impedance

Priidel, Eiko; Pesti, Ksenija; Min, Mart; Ojarand, Jaan; **Märtens, Olev** 2021 IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2021), May 17-20, 2021 : proceedings 2021 / 5 p. : ill <https://doi.org/10.1109/I2MTC50364.2021.9460073>

Grid-based computational algorithm for accurate AC conductivity measurements

Pokatilov, Andrei; Parker, Martin; Kübarsepp, Toomas; **Märtens, Olev**; Kolyshkin, Andrei 16th International Congress of Metrology 2013 / p. 1-4 : ill

Hankel matrix based algorithm for cardiac pulse wave base and peak lines Correction

Krivošei, Andrei; Min, Mart; Annus, Paul; **Märtens, Olev**; Metshein, Margus; Lotamöis, Kristina; Rist, Marek IEEE International Workshop on Medical Measurement and Applications (MEMEA) 2022 / 6 p <https://doi.org/10.1109/MeMeA54994.2022.9856564>

High-accuracy eddy current measurements of metals

Märtens, Olev; Land, Raul; Rist, Marek; Pokatilov, Andrei 2014 IEEE International Workshop On Metrology For Aerospace : May 29-30, 2014, Benevento, Italy : proceedings 2014 / p. 155-160 : ill

High-performance analogue measurement using internal enhanced PWM and ADC of a DSP-chip

Märtens, Olev; Min, Mart; Trampärk, Harri; Liimets, Aivar WISP2007 proceedings : 5th IEEE International Symposium on Intelligent Signal Processing : Alcala de Henares, Madrid (Spain), October 3-5, 2007 2007 / [5] p
<https://ieeexplore.ieee.org/document/4447593>

Image based counterfeit coin validation

Gavrijaševa, Alina; Märtens, Olev BEC 2014 : 2014 14th Biennial Baltic Electronics Conference : proceedings of the 14th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 6-8, 2014, Tallinn, Estonia 2014 / p. 153-156 : ill

Image processing in the woodworking industry : challenges, solutions and platforms

Mölder, Ago; Märtens, Olev Elektronika ir elektrotehnika = Electronics and electrical engineering 2011 / p. 43-46 : ill

Image processing solutions for precise road profile measurement systems = Pilditöötuse lahendused täpsetele tee profili mõõtesüsteemidele

Mölder, Ago 2015 https://www.esther.ee/record=b4476678*est

Impedance cardiography signal processing with Savitzky-Golay and frequency sampling kernels

Märtens, Olev; Metshein, Margus; Tamberg, Gert; Abdullayev, Anar 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 5 l. <https://doi.org/10.1109/BEC56180.2022.9935597>

Impedance measurement solution based on the high time resolution DSP

Märtens, Olev; Land, Raul; Min, Mart; Annus, Paul; Rist, Marek 2020 IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2020), May 25-29, 2020, Dubrovnik, Croatia : proceedings 2020 <https://doi.org/10.1109/I2MTC43012.2020.9128843>

Improved impedance analyzer with binary excitation signals

Märtens, Olev; Land, Raul; Min, Mart; Annus, Paul; Rist, Marek; Reidla, Marko 2015 IEEE 9th International Symposium on Intelligent Signal Processing (WISP 2015) : Siena, Italy, 15-17 May 2015 : [proceedings] 2015 / p. 25-29 : ill

Improved PWM-based sinewave generation : example of the impedance

Abdullayev, Anar; Annus, Paul; Krivošei, Andrei; Metshein, Margus; Märtens, Olev; Rist, Marek Automatic control and computer sciences 2023 / p. 449-458 <https://doi.org/10.3103/S0146411623050024>

Induction brazing of cermets to steel and eddy current testing of joint quality

Laansoo, Andres; Kübarsepp, Jakob; Surženkov, Andrei; Land, Raul; Märtens, Olev; Viljus, Mart Welding in the World 2020 / p. 563-571 <https://doi.org/10.1007/s40194-020-00854-x> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Infotehnoloogia teaduskond

Gordon, Boris; Velmre, Enn; Einer, Lauri; Tamm, Uljas; Meister, Ants; Korsen, Viljo; Märtens, Olev; Parve, Toomas; Ubar, Raimund-Johannes; Min, Mart Leitutajaid ja leitisi Tallinna Tehnikaülikoolis 1922-2007 2008 / lk. 34-47 : ill https://www.esther.ee/record=b2412718*est

Inhomogeneity correction in calibration of electrical conductivity standards

Pokatilov, Andrei; Parker, Martin; Kolyshkin, Andrei; Märtens, Olev; Kübarsepp, Toomas Measurement 2013 / p. 1535-1540 : ill

Investigation of planar coil for eddy current conductivity measurements in wide frequency range

Parker, Martin; Pokatilov, Andrei; Kübarsepp, Toomas; Märtens, Olev; Kolyshkin, Andrei 19th Symposium IMEKO TC 4 Symposium and 17th IWADC Workshop Advances in Instrumentation and Sensors Interoperability, July 18-19, 2013, Barcelona, Spain 2013 / p. 55-59

60 aastat elektroonikainstituuti : 1962-2022

2023 https://www.esther.ee/record=b5557188*est

Laser line detection with sub-pixel accuracy

Mölder, Ago; Märtens, Olev; Saar, Tõnis; Land, Raul Elektronika ir elektrotehnika = Electronics and electrical engineering 2014 / p. 132-135 : ill

Laser scanner calibration dependency on the line detection method

Mölder, Ago; Märtens, Olev; Saar, Tõnis; Land, Raul Elektronika ir elektrotehnika = Electronics and electrical engineering 2015 / p. 66-69 : ill <http://dx.doi.org/10.5755/j01.eee.21.6.13765>

Lock-in integration for detection of tiny bioimpedance variations [Online resource]

Priidel, Eiko; Annus, Paul; Metshein, Margus; Land, Raul; Märtens, Olev; Min, Mart BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / 4 p. : ill <https://doi.org/10.1109/BEC.2018.8600965>

Lock-in measurement of bio-impedance variations

Min, Mart; Märtens, Olev; Parve, Toomas Measurement 2000 / 1, p. 21-28

Lock-in measurement of the hand-hand bio-impedance

Min, Mart; Haldre, H.; Härm, Härm; Märtens, Olev; Märtin, Hannes; Parve, Toomas; Ronk, Ants 8th International IMEKO Conference on Measurement in Clinical Medicine Biomedical Measurement and Instrumentation & 12th International Symposium on Biomedical Engineering, Dubrovnik, Croatia, September 16-19, 1998 : proceedings 1998 / p. 2.49-2.52

Measurement of the electric conductivity of highly conductive metals with 4-electrode impedance method
Gordon, Rauno; Rist, Marek; Märtens, Olev; Min, Mart Lecture notes on impedance spectroscopy : measurement, modeling and applications. Vol. 1 2011 / p. 35-40 <https://www.taylorfrancis.com/chapters/edit/10.1201/b11339-8/measurement-electric-conductivity-highly-conductive-metals-4-electrode-impedance-method-gordon-rist-m%C3%A4rtens-min>

Methods for detection of bioimpedance variations in resource constrained environments
Priidel, Eiko; Annus, Paul; Krivošei, Andrei; Rist, Marek; Land, Raul; Min, Mart; Märtens, Olev Sensors 2020 / art. 1363, 16 p. : ill <https://doi.org/10.3390/s20051363> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Methods for increased sensitivity and scope in automatic segmentation and detection of lung nodules in CT images
Gupta, Anindya; Märtens, Olev; Le Moullec, Yannick; Saar, Tõnis The 15th IEEE International Symposium on Signal Processing and Information Technology ISSPIT 2015 : December 7-10, 2015, Abu Dhabi, UAE : proceedings 2015 / p. 370-375 : ill

Militaarobjektide valvetehnoloogia areng
Udal, Andres; Kaugerand, Jaanus; Savimaa, Raul; Märtens, Olev Sõjateadlane = Estonian journal of military studies 2023 / lk. 194-224 : ill [Militaarobjektide valvetehnoloogia areng https://www.kvak.ee/sojateadlane22/](https://www.kvak.ee/sojateadlane22/) <https://www.esther.ee/record=b4555087> est

Modular system for fast impedance spectrum analysis of biomedical objects
Rist, Marek; Reidla, Marko; Märtens, Olev; Land, Raul; Min, Mart; Parve, Toomas; Annus, Paul XVth International Conference on Electrical Bio-Impedance (ICEBI) and XMth Conference on Electrical Impedance Tomography (EIT) : 22-25 April 2013, Heilbad Heiligenstadt : abstracts 2013 / p. 151 : ill

Modular system for spectral analysis of time-variant impedances
Rist, Marek; Reidla, Marko; Land, Raul; Parve, Toomas; Märtens, Olev; Annus, Paul; Ojarand, Jaan; Min, Mart 6th European Conference of the International Federation for Medical and Biological Engineering : MBEC 2014, 7-11 September 2014, Dubrovnik, Croatia 2015 / p. 858-861 : ill

Multi-frequency and multi-channel bio-impedance measurement solution [Electronic resource]
Märtens, Olev; Min, Mart; Land, Raul; Annus, Paul Proceedings of 7th Nordic Signal Processing Symposium (NORSIG 2006) : Reykjavik, Iceland, June 7-9, 2006 2006 / [4] p. [CD-ROM] <https://ieeexplore.ieee.org/document/4052217>

Multi-frequency bioimpedance measurement : undersampling approach
Märtens, Olev; Min, Mart Proceedings of the 6th Nordic Signal Processing Symposium : NorSig 2004 : June 9-11, 2004, Espoo, Finland 2004 / p. 145-148

Multifrequency vector impedance measurement: undersampled DFT with noise pre-filtering
Märtens, Olev; Min, Mart BEC 2006 : 2006 International Baltic Electronics Conference : Tallinn University of Technology, October 2-4, 2006, Tallinn, Estonia : proceedings of the 10th Biennial Baltic Electronics Conference 2006 / p. 217-220 : ill

Multisine dynamic EBI spectrum analyser for in vivo experiments
Min, Mart; Märtens, Olev; Parve, Toomas Medical & biological engineering & computing 1999 / Suppl. 2, Proceedings of the European Medical & Biomedical Engineering Conference : EMBEC'99 : November 4-7, 1999, Vienna, Austria. Part 1, p. 144-145

Non-standard electrode placement strategies for ECG signal acquisition
Metshein, Margus; Krivošei, Andrei; Abdullayev, Anar; Annus, Paul; Märtens, Olev Sensors 2022 / art. 9351 <https://doi.org/10.3390/s22239351> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nonuniform sampling and demodulation for wideband multi-frequency bioimpedance measurements
Min, Mart; Bilinskis, Ivars; Artyukh, Y.; Annus, Paul; Land, Raul; Märtens, Olev Proceedings of the "2007 Workshop on digital Alias-free Signal Processing" (WDASP'07) : 17 April 2007, London, UK 2007 / [7] p

On-Desk Model-Based Study for Evaluating the Effect of Squeezing the Arteries in the Forearm on the Bioimpedance and Pressure of Blood
Metshein, Margus; Annus, Paul; Land, Raul; Rist, Marek; Min, Mart; Lotamöis, Kristina; Märtens, Olev Journal of sensors 2023 / art. 5710835 <https://doi.org/10.1155/2023/5710835>

Parameter estimation by sparse reconstruction with wideband dictionaries = Signaali parameetrite hindamine kasutades hajusat taastamist laiaribaliste sõnastikega
Butsenko, Maksim 2018 <https://digi.lib.ttu.ee/i/?11199>

Phase-increment sampling in chirp signal based impedance measurements
Märtens, Olev; Min, Mart; Land, Raul; Ojarand, Jaan; Rist, Marek Sampling Theory and Applications 2017 : 12th International

Phase-increment sampling in chirp signal based impedance measurements [Electronic resource]

Märtens, Olev; Min, Mart; Land, Raul; Ojarand, Jaan; Rist, Marek 2017 International Conference on Sampling Theory and Applications (SampTA) : 12th International Conference : Tallinn, Estonia, July 3-7 : [abstracts] 2017 / p. 66. [USB]

Phase-increment sampling in chirp signal based impedance measurements [Online resource]

Märtens, Olev; Min, Mart; Land, Raul; Ojarand, Jaan; Rist, Marek 2017 International Conference on Sampling Theory and Applications (SampTA) : 12th International Conference : Tallinn, Estonia, July 3-7 : [proceedings] 2017 / p. 604-608 : ill
<https://doi.org/10.1109/SAMPTA.2017.8024393>

Phase-sensitive detectors

Märtens, Olev IEEE transactions on instrumentation and measurement 2000 / 5, p. 1046-1049

Piccolo-stick and pcb-coil based simple coin validator

Reidla, Marko; Märtens, Olev; Land, Raul; Rist, Marek EDERC 2012 : proceedings of the 5th European DSP in Education & Research Conference : 13-14 September 2012, Amsterdam, The Netherlands 2012 / p. 81-84
<https://ieeexplore.ieee.org/document/6532230>

PLL-based extraction of the cardiac component from the bio-impedance signal

Märtens, Olev; Min, Mart; Annus, Paul; Land, Raul; Krivošei, Andrei; Metshein, Margus 2018 IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2018) : proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/I2MTC.2018.8409848>

Precise eddy current impedance measurement of metal plates

Märtens, Olev; Gordon, Rauno; Rist, Marek; Min, Mart; Pokatilov, Andrei Kolyshkins, A. Lecture notes on impedance spectroscopy : measurement, modeling and applications. Vol. 1 2011 / p. 43-45

Precise eddy current measurements : improving accuracy of determining of electrical conductivity of metal plates

Märtens, Olev; Land, Raul; Gordon, Rauno; Min, Mart; Rist, Marek; Pokatilov, Andrei Lecture notes on impedance spectroscopy : measurement, modeling and applications. Vol. 4 2014 / p. 109-115 : ill

Precise mixed signal synchronous detector with spectrally improved binary switching

Märtens, Olev 6th IEEE International Symposium on Intelligent Signal Processing : WISP 2009 : 26-28 August 2009, Budapest 2009 / p. 77-80 : ill <https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=5286575>

Precise synchronous detectors

Märtens, Olev Ringhäling '99 : VI Rahvusvahelise Telekommunikatsioonipäeva konverentsi ettekannete materjalid 1999 / lk. 74-79: ill

A preliminary computer-aided technique for CT based lung segmentation

Gupta, Anindya; Märtens, Olev; Le Moullec, Yannick Proceedings of the 8th Annual Conference of the Estonian National Doctoral School in Information and Communication Technologies : December 5-6, 2014, Rakvere 2014 / p. 43-46 : ill

Pseudorandom sampling in a multi-frequency bioimpedance analyser

Märtens, Olev; Min, Mart BEC 2002 : proceedings of the 8th Biennial Baltic Electronics Conference : October 6-9, 2002, Tallinn, Estonia 2002 / p. 253-256 : ill

Pöörisvool tuvastab võltsmündid ja liigutab hõljukronge

Vill, Ants Director. Inseneeria 2021 / lk. 74-80 : fot https://www.esther.ee/record=b1519314*est <https://director.ee/2021/09/01/poorisvool-tuvastab-voltsmundid-ja-liigutab-holjukronge/>

QUADRA impedance spectroscopy devices for dynamic measurements of bio-objects

Rist, Marek; Reidla, Marko; Märtens, Olev; Min, Mart; Annus, Paul; Land, Raul; Parve, Toomas 34th Annual International IEEE EMBS Conference : August 28 - September 1, 2012, Hilton Bayfront Hotel in San Diego, California, USA : abstracts 2012 / p. 557 : ill

Quantization of the response signal differences for the electrical bioimpedance measurement

Annus, Paul; Land, Raul; Priidel, Eiko; Metshein, Margus; Min, Mart; Märtens, Olev EMBEC & NBC 2017 : joint conference of the European Medical and Biological Engineering Conference (EMBEC) and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC), Tampere, Finland, June 2017 2018 / p. 290-293 : ill https://doi.org/10.1007/978-981-10-5122-7_73

Sensor-location-specific joint acquisition of peripheral artery bioimpedance and photoplethysmogram for wearable applications

Metshein, Margus; Abdullayev, Anar; Gautier, Antoine; Larras, Benoit; Frappe, Antoine; Cardiff, Barry; Annus, Paul; Land, Raul; Märtens, Olev Sensors 2023 / art. 7111 <https://doi.org/10.3390/s23167111>

Simple acoustical signature based coin validation

Märtens, Olev; Gavrijaševa, Alina; Land, Raul; Min, Mart 2015 IEEE 9th International Symposium on Intelligent Signal Processing (WISP 2015) : Siena, Italy, 15-17 May 2015 : [proceedings] 2015 / p. 120-123 : ill

Simple DSP interface for impedance spectroscopy of piezo-sensors

Märtens, Olev; Reidla, Marko; Saar, Tõnis BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 343-344 : ill

Simplified DFT with sorted accumulation of input samples

Märtens, Olev BEC 2008 : 2008 International Biennial Baltic Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 329-332 : ill

Slope-based event-driven feature extraction for cardiac arrhythmia classification

Duforest, Julien; Larras, Benoit; John, Deepu; Märtens, Olev; Frappe, Antoine 2021 IEEE Biomedical Circuits and Systems Conference 2021 / 4 | <https://doi.org/10.1109/BioCAS49922.2021.9644957>

Sparse reconstruction method for separating cardiac and respiratory components from electrical bioimpedance measurements

Butsenko, Maksim; Märtens, Olev; Krivošei, Andrei; Le Moullec, Yannick Elektronika ir elektrotehnika = Electronics and electrical engineering 2018 / p. 57-61 : ill <https://doi.org/10.5755/j01.eie.24.5.21844> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Study of electrode locations for joint acquisition of impedance- and electro-cardiography signals

Metshein, Margus; Gautier, Antoine; Larras, Benoit; Frappe, Antoine; John, Deepu; Cardiff, Barry; Annus, Paul; Land, Raul; Märtens, Olev 2021 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC) Oct 31 - Nov 4, 2021 : virtual conference 2021 / p. 7264-7267 : ill <https://doi.org/10.1109/EMBC46164.2021.9629504> Conference Proceedings at Scopus Article at Scopus Article at WOS

Study of various excitation and reference signals for pulsed correlation-based ultrasound signal processing

Märtens, Olev; Saar, Tõnis; Reidla, Marko Elektronika ir elektrotehnika = Electronics and electrical engineering 2010 / 9, lk. 89-92 : ill

A survey on open-access reference image database for lung cancer

Gupta, Anindya; Märtens, Olev; Le Moullec, Yannick Proceedings of the 8th Annual Conference of the Estonian National Doctoral School in Information and Communication Technologies : December 5-6, 2014, Rakvere 2014 / p. 47-50 : ill

Synchronization algorithm for RFID-reader and its implementation

Märtens, Olev; Liimets, Aivar; Kuusik, Alar 2015 Advances in Wireless and Optical Communications RTUWO : 5-6 November 2015, Riga, Latvia : proceedings 2015 / p. 82-85 : ill <https://doi.org/10.1109/RTUWO.2015.7365725>

Teaduse ja ülikoolide rahastamisest tehnikateaduse poolelt

Märtens, Olev Sirp 2021 / lk. 15 <https://www.sirp.ee/s1-artiklid/c21-teadus/vastukaja-teaduse-ja-likoolide-rahastamisest-tehnikateaduse-poolelt/>

The piezo-electric impedance spectroscopy : solutions and applications = Piesoelektriline impedants-spektroskoopia : lahendused ja rakendused

Saar, Tõnis 2013 https://www.estet.ee/record=b2967240*est

TMS320F2811-based multi-frequency multi-channel bio-impedance measurement device

Märtens, Olev; Min, Mart; Land, Raul; Liimets, Aivar; Trampäärk, Harri; Annus, Paul EDERS 2008 : 3rd European DES Education & Research Symposium : proceedings : Tel Aviv, Israel, 18th June 2008 / p. 179-183. [CD-ROM]

TMS320F28069-based impedance spectroscopy with binary excitation

Rist, Marek; Reidla, Marko; Min, Mart; Parve, Toomas; Märtens, Olev; Land, Raul EDERC 2012 : proceedings of the 5th European DSP in Education & Research Conference : 13-14 September 2012, Amsterdam, The Netherlands 2012 / p. 217-220 <https://ieeexplore.ieee.org/document/6532258>

TMS320F28335-based high-accuracy complex network analyzer instrument

Reidla, Marko; Märtens, Olev; Land, Raul EDERC 2012 : proceedings of the 5th European DSP in Education & Research Conference : 13-14 September 2012, Amsterdam, The Netherlands 2012 / p. 44-47 <https://ieeexplore.ieee.org/abstract/document/6532222>

TMS320F28335-based piezosensor monitor-node

Märtens, Olev; Saar, Tõnis; Reidla, Marko EDERC2010 European DSP in Education and Research Conference : proceedings,(Nice, France, Dec 1-2, 2010) 2010 / p. 62-65

A tool for lung nodules analysis based on segmentation and morphological operation

Gupta, Anindya; Märtens, Olev; Le Moullec, Yannick; Saar, Tõnis 2015 IEEE 9th International Symposium on Intelligent Signal Processing (WISP 2015) : Siena, Italy, 15-17 May 2015 : [proceedings] 2015 / p. 193-197 : ill
<http://dx.doi.org/10.1109/WISP.2015.7139186>

Unsupervised feature mapping via stacked sparse autoencoder for automated detection of large pulmonary nodules in CT images

Gupta, Anindya; Saar, Tõnis; Märtens, Olev; Le Moullec, Yannick Elektronika ir elektrotehnika = Electronics and electrical engineering 2017 / p. 59-63 : ill <http://dx.doi.org/10.5755/j01.eie.23.6.19695>

Uus sensorsignaalitöötuse õppetool : [elektroonikainstituudi rakenduselektronika õppetooli muutmisest sensorsignaalitöötuse õppetooliks]

Märtens, Olev Mente et Manu 2009 / 16. jaan., lk. 2 : fot https://www.esther.ee/record=b1242496*est

Variable-resolution image processing for validation of coins

Märtens, Olev; Saar, Tõnis; Gavrijaševa, Alina; Mölder, Ago 2011 IEEE 7th International Symposium on Intelligent Signal Processing (WISP) : Floriana, Malta, September 19-21, 2011 : proceedings 2011 / p. 176-179: ill
<https://ieeexplore.ieee.org/document/6051711>

Verification of performance of commercial LCR meters

Satrapinski, Alexandre; Kübarsepp, Toomas; **Märtens, Olev** Conference on Precision Electromagnetic Measurements, DCC, Daejeon, Korea 2010 <https://ieeexplore.ieee.org/document/5545242>