

After-effect induced by microwave radiation in human electroencephalographic signal : a feasibility study

Bachmann, Maie; Päeske, Laura; Ioannides, Andreas A.; Lass, Jaanus; Hinrikus, Hiie International journal of radiation biology 2018 / p. 896–901 : ill <https://doi.org/10.1080/09553002.2018.1478164> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Application of electroencephalographic signal based measures for early detection of depression symptoms in occupational health = Elektroentsefalograafilisel signaalil põhinevate indikaatorite kasutamine depressiooni sümptomite varaseks avastamiseks töötervishoius

Pöld, Toomas 2021 https://www.ester.ee/record=b5473276*est <https://digikogu.taltech.ee/et/Item/c9b2a014-84fc-4003-88a2-85836830038a> <https://doi.org/10.23658/taltech.61/2021>

Assessment of electroencephalographic measures applied in the detection of depression = Depressiooni avastamiseks kasutatavate elektroentsefalograafilise signaali mõõdikute analüüs

Päeske, Laura 2021 https://www.ester.ee/record=b5411747*est <https://digikogu.taltech.ee/et/Item/44751b09-b47f-4757-847f-dd0f1d39b91b> <https://doi.org/10.23658/taltech.17/2021>

Biosignal interpretation : study of cardiac arrhythmias and electromagnetic field effects on human nervous system

Lass, Jaanus 2002 http://www.ester.ee/record=b1715357*est

Bispectrum for the detection of the effect of photic and microwave stimulation on human EEG

Parts, Maie; Lipping, Tarmo; Lass, Jaanus; Hinrikus, Hiie Proceedings of the 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. Vol. 25, A New Beginning for Human Health : volume 3 of 4 : 17-21 September 2003, Cancun, Mexico 2003 / p. 2327-2330 : ill

Brain functional connectivity in depression : gender differences in EEG

Orgo, Laura; Bachmann, Maie; Kalev, Kaia; Hinrikus, Hiie; Järvelaid, Mari 2016 IEEE EMBS Conference on Biomedical Engineering and Sciences (IECBES) : Kuala Lumpur, 4-8 December 2016 2016 / p. 270-273 : ill <https://doi.org/10.1109/IECBES.2016.7843456>

Brain stimulation by modulated microwave radiation: a feasibility study

Bachmann, Maie; Bachmann, Jaanus; Ioannides, Andreas A.; Hinrikus, Hiie 2018 EMF-Med 1st World Conference on Biomedical Applications of Electromagnetic Fields (EMF-Med), 10-13 Sept. 2018 2018 / 2 p <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&number=8526055&tag=1>

Brain-to-brain loop concept in application to porphyrias : 10-year experience at North Estonia Medical Centre

Zemtsovskaja, Galina; Pikta, Marika; Borissova, Julia; Pille, Viive; Luman, Merike; Viigimaa, Margus Eesti Arst 2016 / p. 61 <http://ojs.utlib.ee/index.php/EA/article/viewFile/12917/8000> http://www.ester.ee/record=b4600434*est

Changes in EEG caused by modulated microwave field

Hinrikus, Hiie; Lass, Jaanus; Parts, Maie; Tuulik, Viu EBEA 2003 : 6th International Congress of the European Bioelectromagnetics Association (EBEA) : 13-15 November 2003 : Budapest, Hungary : book of abstracts 2003 / p. 171

Changes in EEG measures of a recipient of the mRNA COVID-19 vaccine - a case study

Uudeberg, Tuuli; Hinrikus, Hiie; Päeske, Laura; Lass, Jaanus; Bachmann, Maie 2022 44th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC) 2022 / p. 3702-3705 <https://doi.org/10.1109/EMBC48229.2022.9871524> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Changes in human EEG caused by low level modulated microwave stimulation

Hinrikus, Hiie; Parts, Maie; Lass, Jaanus; Tuulik, Viu Bioelectromagnetics 2004 / p. 431-440 : ill

Classification and clustering of transients in the EEG of epileptics

Lossmann, Eerik; Wahlberg, P. 9th Nordic Meeting on Medical and Biological Engineering, Lund, Sweden, June 13-16, 1993 1993

Clustering of transients in the EEG of epileptics

Lossmann, Eerik; Wahlberg, Patrik 1993

Complex signal classification algorithms based on the third-order statistical models

Lossmann, Eerik 1999 http://www.ester.ee/record=b1273070*est

Correlation between electroencephalographic markers in the healthy brain

Päeske, Laura; Uudeberg, Tuuli; Hinrikus, Hiie; Lass, Jaanus; Bachmann, Maie Scientific reports 2023 / art. 6307 <https://doi.org/10.1038/s41598-023-33364-z>

DC-level detection of burst-suppression EEG

Lipping, Tarmo; Loula, P.; Jäntti, Ville; Yli-Hankala, Arvi Methods of information in medicine 1994 / 1, p. 35-38: ill

Dependence of the EEG nonlinear coupling on the frequency bands and the segment lengths

Orgo, Laura; Bachmann, Maie; Kalev, Kaia; Järvelaid, Mari; **Raik, Jaan; Hinrikus, Hiie** 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. 799-802 https://doi.org/10.1007/978-981-10-5122-7_200

Detection and interpretation of low-level stressor effects on brain using complex methods

Lass, Jaanus; Ferenets, Rain; Riisalu, R.; **Tuulik, Viuu; Hinrikus, Hiie** Workshop on Biomedical Information Engineering : 25-27 June, 2000, Istanbul - Turkey : proceedings 2000 / p. 235-238 : ill

Detection of the effect of weak stressors on human resting electroencephalographic signal = Nõrkade stressorite mõju avastamine inimese puhkeoleku elektroentsefalograafilises signaalis

Suhhova, Anna 2012

Determination of the functional state of central nervous system in chemical stress by EEG and psychometrical methods

Tuulik, Viuu; Meister, Ants; Raja, Aimur; Lossmann, Eerik Proc. of a-Conference 1994 / p. 30

EEG analyzer prototype based on FPGA

Jenihhin, Maksim; Gorev, Maksim; Pesonen, Vadim; Mihhailov, Dmitri; Ellervee, Peeter; Hinrikus, Hiie; Bachmann, Maie; Lass, Jaanus 7th International Symposium on Image and Signal Processing and Analysis (ISPA 2011) : September 4-6, 2011, Dubrovnik, Croatia : proceedings 2011 / p. 101-106 : ill

EEG in deepening anaesthesia

Jäntti, Ville; Ferenets, Rain Workshop on Neuroscience and Information Technology in Tampere 2004 / [1] p

EEG patterns and regularity properties during propofol induced anesthesia/sedation

Ferenets, Rain 2007 http://www.ester.ee/record=b2301505*est

EEG signal in monitoring brain function in anesthesia and intensive care : a review

Lipping, Tarmo; Jäntti, Ville Proceedings of the Estonian Academy of Sciences. Engineering 2004 / 2, p. 95-109 : ill

EEG spectral asymmetry index for detection of depression at individual and fixed frequency bands [Electronic resource]

Suhhova, Anna; Bachmann, Maie; Lass, Jaanus; Adamssoo, Kaie; Võhma, Ülle; **Hinrikus, Hiie** IFMBE proceedings ; Vol. 39 2012 / p. 589-592 : ill [CD-ROM]

EEG spectral asymmetry is dependent on education level of men

Pöld, Toomas; Bachmann, Maie; Päeske, Laura; Kalev, Kaia; Lass, Jaanus; Hinrikus, Hiie World Congress on Medical Physics and Biomedical Engineering 2018 : June 3–8, 2018, Prague, Czech Republic (Vol. 2) 2018 / p. 405–408 https://doi.org/10.1007/978-981-10-9038-7_76 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

EEG spectrum-based analysis of human brain bioelectrical activity using photic stimulation

Tuulik, Viuu; Lossmann, Eerik; Meister, Ants; Raja, Aimur Lecture Notes of the ICB Seminars "Statistics and Clinical Practice" 2000 / p. 116-120

Effect of 450 MHz microwave modulated with 217 Hz on human EEG in rest

Bachmann, Maie; Säkki, Maksim; Kalda, Jaan; Lass, Jaanus; Tuulik, Viuu; Hinrikus, Hiie The environmentalist 2005 / 2/4, p. 165-171

Effect of microwave radiation on human EEG at two different levels of exposure

Suhhova, Anna; Bachmann, Maie; Karai, Deniss; Lass, Jaanus; Hinrikus, Hiie Bioelectromagnetics 2012 / 11 p. : ill

Effect of modulated microwave radiation on electroencephalographic rhythms and cognitive processes

Hinrikus, Hiie; Bachmann, Maie; Lass, Jaanus; Tuulik, Viuu Estonian journal of engineering 2008 / 2, p. 91-106 : ill

Effect of modulated microwave radiation on human resting electroencephalographic signal = Moduleeritud mikrolainekiirguse mõju inimese puhkeoleku elektroentsefalograafilisele signaalile

Bachmann, Maie 2008 http://www.ester.ee/record=b2373842*est

Effect of the microwave radiation on human EEG at different modulation frequencies [Electronic resource]

Hinrikus, Hiie; Bachmann, Maie; Lass, Jaanus; Tuulik, Viuu Medicon and Health Telematics 2004 "Health in the Information Society" : Xth Mediterranean Conference on Medical and Biological Engineering : July 31 - August 5, 2004, Ischia, Napeles-Italy 2004 / [4] p. : ill. [CD-ROM]

ELC-ECG: efficient LSTM cell for ECG classification based on quantized architecture

Mirsalari, Seyed Ahmad; Nazari, Najmeh; Ansarmohammadi, Seyed Ali; Sinaei, Sima; Salehi, Mostafa E.; Daneshtalab, Masoud

Electroencephalography as an objective indicator of stress

Gavriljuk, Marietta; Uudeberg, Tuuli; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Bachmann, Maie 19th Nordic-Baltic Conference on Biomedical Engineering and Medical Physics : Proceedings of NBC 2023, June 12–14, 2023, Liepaja, Latvia 2023 / p. 221–226
https://doi.org/10.1007/978-3-031-37132-5_28

Estimation of the complexity of the electroencephalogram for brain monitoring in intensive care = Electroentsefalogrammi kompleksuse hindamine aju monitooringul intensiivravits

Anier, Andres 2014 http://www.ester.ee/record=b3050804*est

FPGA-based implementation of EEG analyzer for detection of depressive disorder

Pesonen, Vadim; Gorev, Maksim; Mihhailov, Dmitri Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK kuuenda aastakonverentsi artiklite kogumik : 3.-5. oktoobril 2012, Laulasmaa 2012 / p. 67-70 : ill

FPGA-based implementation of EEG analyzer for detection of depressive disorder

Gorev, Maksim; Pesonen, Vadim; Mihhailov, Dmitri Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK neljanda aastakonverentsi artiklite kogumik : 26.-27. novembril 2010, Essu mõis 2010 / lk. 69-72 : ill

Helgem vanadus teaduse toel [Võrguväljaanne]

Uusen, Kaire delfi.ee 2021 ["Helgem vanadus teaduse toel "](#)

Higuchi's fractal dimension for analysis of the effect of microwave exposure in depression

Bachmann, Maie; Suhhova, Anna; Lass, Jaanus; Adamsoo, Kaire; Võhma, Ülle; Hinrikus, Hiie Proceedings : 7th International Workshop on Biological Effects of Electromagnetic Field : October 2012 (Malta) 2012 / 4 p. : ill

Kaasaskantav seade hindab aju seisundit : [TTÜ teadlaste leiutatud EEG analüsaatorist]

Imeline Teadus 2013 / lk. 96 : ill

Kuidas tuvastada depressiooni enne selle subjektiivsete sümptomite avastamist? [Võrguväljaanne]

jarvateataja.postimees.ee 2021 ["Kuidas tuvastada depressiooni enne selle subjektiivsete sümptomite avastamist?"](#)

Long-term stability of EEG spectral asymmetry index - preliminary study

Uudeberg, Tuuli; Päeske, Laura; Pöld, Toomas; Lass, Jaanus; Hinrikus, Hiie; Bachmann, Maie XV Mediterranean Conference on Medical and Biological Engineering and Computing - MEDICON 2019 : proceedings of MEDICON 2019, September 26–28, 2019, Coimbra, Portugal 2020 / p. 276-281 https://doi.org/10.1007/978-3-030-31635-8_33 [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Long-term stability of resting state EEG-based linear and nonlinear measures

Pöld, Toomas; Peäske, Laura; Hinrikus, Hiie; Lass, Jaanus; Bachmann, Maie International journal of psychophysiology 2021 / p. 83-87 <https://doi.org/10.1016/j.jpsycho.2020.11.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Low-level microwave effects on EEG

Hinrikus, Hiie; Lass, Jaanus; Tuulik, Viuu Medical physics 2000 / 6, [CD-ROM], Digest of Papers of the 2000 World Congress on Medical Physics and Biomedical Engineering and [...] : Chicago 2000 : July 23-28, 2000, Chicago's Navy Pier, [4] p. : ill

Low-level microwave effects on EEG alpha and theta waves [Electronic resource]

Parts, Maie; Lass, Jaanus; Lipping, Tarmo; Tuulik, Viuu; Hinrikus, Hiie Proceedings of World Congress on Medical Physics and Biomedical Engineering : Sidney, Australia, 2003 2003 / [4] p. [CD-ROM]

Methods for classifying depression in single channel EEG using linear and nonlinear signal analysis

Bachmann, Maie; Päeske, Laura; Kalev, Kaia; Aarma, Katrin; Lehtmets, Andres; Ööpik, Pille; Lass, Jaanus; Hinrikus, Hiie Computer methods and programs in biomedicine 2018 / p. 11–17 : ill <https://doi.org/10.1016/j.cmpb.2017.11.023> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Microwave radiation has modulation frequency dependent stimulating effect on human EEG rhythms

Lass, Jaanus; Hinrikus, Hiie; Bachmann, Maie; Tuulik, Viuu Proceedings of the 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society : San Francisco, CA, USA, September 1-5, 2004. Vol. 2 2004 / p. 4225-4228 : ill
<https://pubmed.ncbi.nlm.nih.gov/17271236/>

Modulated low-level electromagnetic field effects on EEG visual event-related potentials

Lass, Jaanus; Kruusing, Kristjan; Hinrikus, Hiie Estonian journal of engineering 2008 / p. 124-137 : ill
https://artiklid.elnet.ee/record=b1022240*est

Multichannel EEG-based sleep stage scoring

Lossmann, Eerik 1997

Multi-level binarized LSTM in EEG classification for wearable devices

Nazari, N.; Mirsalari, Seyed Ahmad; Sinaei, S.; Salehi, M.E.; **Daneshtalab, Masoud** 2020 28th Euromicro International Conference on Parallel, Distributed and Network-Based Processing : PDP 2020, Västerås, Sweden, 11-13 March 2020 / p. 175-181
<https://doi.org/10.1109/PDP50117.2020.00033>

Muutus ajutöös võimaldab märgata depressiooni enne selle avaldumist [Võrguväljaanne]

Oidermaa, Jaan-Juhan novaator.err.ee 2022 "[Muutus ajutöös võimaldab märgata depressiooni enne selle avaldumist](#)"

Negative correlation between functional connectivity and small-worldness in the alpha frequency band of a healthy brain

Päeske, Laura; Hinrikus, Hiie; Lass, Jaanus; Raik, Jaan; Bachmann, Maie Frontiers in Physiology 2020 / Art. nr. 910
<https://doi.org/10.3389/fphys.2020.00910> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Neural network-based analysis of quantitative EEG data in case of chronic occupational chemical stress

Tuulik, Viuu; Meister, Ants; Raja, Aimur; Lossmann, Eerik Electroencephalography and clinical neurophysiology 1996 / n. 4. Special issue, Abstracts of the 8th European Congress of Clinical Neurophysiology, Munich, Germany, Oct. 9-11, 1996. p. 327

Parametric mechanism of excitation of the electroencephalographic rhythms by modulated microwave radiation

Hinrikus, Hiie; Bachmann, Maie; Lass, Jaanus International journal of radiation biology 2011 / p. 1077-1085 : ill
<https://pubmed.ncbi.nlm.nih.gov/21913816/>

Processing EEG during anaesthesia and cardiac surgery with nonlinear order statistics based methods

Lipping, Tarmo 2001 https://www.ester.ee/record=b1476353*est

Reliability of electroencephalogram-based individual markers - case study

Uudeberg, Tuuli; Päeske, Laura; Hinrikus, Hiie; Lass, Jaanus; Bachmann, Maie 2020 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC) 2020 / p. 276 - 279 <https://doi.org/10.1109/EMBC44109.2020.9175274>
[Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Resting EEG functional connectivity and graph theoretical measures for discrimination of depression

Orgo, Laura; Bachmann, Maie; Kalev, Kaia; Järvelaid, Mari; Raik, Jaan; Hinrikus, Hiie 4th IEEE EMBS International Conference on Biomedical and Health Informatics, BHI 2017 : Orlando, Florida, USA, 16-19 February 2017 / p. 389-392 : ill
<https://doi.org/10.1109/BHI.2017.7897287>

Revealing small hidden changes in human EEG by Higuchi's fractal dimension

Bachmann, Maie; Suhhova, Anna; Lass, Jaanus; Hinrikus, Hiie Riga Technical University 53rd International Scientific Conference dedicated to the 150th anniversary and the 1st Congress of World Engineers and Riga Polytechnical Institute/RTU Alumni : 11-12 October 2012, Riga, Latvia : [abstracts] 2012 / p. 661 : ill https://link.springer.com/chapter/10.1007/978-3-642-34197-7_12

Revealing small hidden changes in human EEG by Higuchi's fractal dimension [Electronic resource]

Bachmann, Maie; Suhhova, Anna; Lass, Jaanus; Hinrikus, Hiie IFMBE proceedings ; Vol. 38 2013 / p. 47-50 : ill [CD-ROM]

Segmentation of EEG signals with two adaptive AR-models

Meister, Ants IX Nordic Meeting on Medical and Biological Engineering, Lund, Sweden, June 13-16, 1993 1993

Single channel EEG analysis for detection of depression

Bachmann, Maie; Lass, Jaanus; Hinrikus, Hiie Biomedical signal processing and control 2017 / p. 391-397 : ill
<https://doi.org/10.1016/j.bspc.2016.09.010>

Some phase-sensitive and spectral methods in biomedical engineering

Meister, Ants 1994 http://www.ester.ee/record=b1066293*est

Spectral asymmetry index and Higuchi's fractal dimension for detecting microwave radiation effect on electroencephalographic signal

Bachmann, Maie; Lass, Jaanus; Suhhova, Anna; Hinrikus, Hiie Proceedings of the Estonian Academy of Sciences 2014 / p. 234-239 : ill

Surrogate data method requires end-matched segmentation of electroencephalographic signals to estimate non-linearity

Päeske, Laura; Bachmann, Maie; Pöld, Toomas; Oliveira, Sara Pereira Mendes de; Lass, Jaanus; Raik, Jaan; Hinrikus, Hiie Frontiers in physiology 2018 / 1350 ; 9 p. : ill <https://doi.org/10.3389/FPHYS.2018.01350> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Une faaside liigitus EEG-signaali alusel wavelet-teisenduse ja närvivõrgu kasutamisega

Lossmann, Eerik Raadiotehnika '97 : ettekannete materjalid 1997 / lk. 55-64: ill

Valmis doktoritöö depressiooni tuvastamisest [Võrguväljaanne]

mu.ee 2021 ["Valmis doktoritöö depressiooni tuvastamisest"](#)