

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>

Assessment of objective symptoms of depression in occupational health examination

Pöld, Toomas; Päeske, Laura; Bachmann, Maie; Lass, Jaanus; Hinrikus, Hiie Journal of occupational and environmental medicine 2019 / p. 605–609 <https://doi.org/10.1097/JOM.0000000000001622> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Audiovisual emotion recognition in wild

Avots, Egils; Sapinski, Tomasz; Bachmann, Maie; Kaminska, Dorota Machine Vision and Applications 2019 / p. 975–985 : ill <https://doi.org/10.1007/s00138-018-0960-9> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biomeditsiinitehnika - tehnoloogia tervise heaks

Hinrikus, Hiie; Bachmann, Maie; Pilt, Kristjan; Meigas, Kalju; Fridolin, Ivo Teadusmõtte Eestis (X). Tehnikateadused. 3 : [artiklikogumik] 2019 / lk. 48–58 : ill https://www.ester.ee/record=b5208765*est

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=&arnumber=8526055&tag=1>

Cognitive disorders in patients with chronic kidney disease : approaches to prevention and treatment

Pepin, Marion; Klimkowicz-Mrowiec, Aleksandra; Godefroy, Oliver; Delgado, Pilar; Carriazo, Sol; Ferreira, Ana Carina; Golenia, Aleksandra; Malyszko, Jolanta; Grodzicki, Tomasz; Giannakou, Konstantino; Bachmann, Maie; Fridolin, Ivo European Journal of Neurology 2023 / p. 2899–2911 <https://doi.org/10.1111/ene.15928>

Cognitive disorders in patients with chronic kidney disease : specificities of clinical assessment

Pepin, Marion; Ferreira, Ana Carina; Arici, Mustafa; Bachmann, Maie; Barbieri, Michelangela; Bumblyte, Inga Arune Nephrology Dialysis Transplantation 2022 / p. ii23–ii32 <https://doi.org/10.1093/ndt/gfab262> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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>

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

Suhhova, Anna 2012

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 functional connectivity detects seasonal changes

Päeske, Laura; Bachmann, Maie; Raik, Jaan; Hinrikus, Hiie World Congress on Medical Physics and Biomedical Engineering 2018 : June 3–8, 2018, Prague, Czech Republic (Vol. 2) 2018 / p. 237-240 https://doi.org/10.1007/978-981-10-9038-7_44 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

EEG spectral asymmetry index detects differences between leaders and non-leaders

Pöld, Toomas; Bachmann, Maie; Orgo, Laura; Kalev, Kaia; Lass, Jaanus; 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. 17-20 https://doi.org/10.1007/978-981-10-5122-7_5

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

Suhhova, Anna; Bachmann, Maie; Lass, Jaanus; Adamsoo, Kaire; Vöhma, 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](#)

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]

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

Ensemble approach for detection of depression using EEG features

Avots, Egils; Jermakovs, Klavs; Bachmann, Maie; Päeske, Laura; Ozcinar, Cagri; Anbarjafari, Gholamreza Entropy 2022 / art. 211 <https://doi.org/10.3390/e24020211> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Erratum: Cognitive disorders in patients with chronic kidney disease: specificities of clinical assessment (Nephrol Dial Transplant DOI: 10.1093/ndt/gfab262)

Pépin, Marion; Ferreira, Ana Carina; Arici, Mustafa; Bachmann, Maie; Barbieri, Michelangela; Bumblyte, Inga Arune; Carriazo, Sol; Delgado, Pilar; Garneata, Liliana; Giannakou, Konstantinos Nephrology dialysis transplantation 2022 / 1 p <https://doi.org/10.1093/ndt/gfab339> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Helgem vanadus teaduse toel

Uusen, Kaire Tervis Pluss 2021 / lk. 69-71 : fot https://www.ester.ee/record=b1453514*est <https://tervispluss.delfi.ee/artikkel/94545003/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; Vöhma, Ülle; **Hinrikus, Hiie** Proceedings : 7th International Workshop on Biological Effects of Electromagnetic Field : October 2012 (Malta) 2012 / 4 p. : ill

Influence of mental stress on the arterial stiffness parameters detected from photoplethysmographic signal waveform

Pilt, Kristjan; Karai, Deniss; Bachmann, Maie; Gavriljuk, Marietta; Allik, Ardo; Uudeberg, Tuuli 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 4 p <https://doi.org/10.1109/BEC56180.2022.9935609>

Limiting exposure to radiofrequency radiation : the principles and possible criteria for health protection

Hinrikus, Hiie; Koppel, Tarmo; Lass, Jaanus; Roosipuu, Priit; Bachmann, Maie International Journal of Radiation Biology 2023 / p. 1167-1177 <https://doi.org/10.1080/09553002.2023.2159567> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Linnaplaneerimise heaolu skoor mõõdab, mida linnaelanikud tegelikult tunnevad

Fridolin, Ivo; Pilt, Kristjan; Bachmann, Maie; Grišakov, Kristi; Tärnov, Külle; Sternfeldt, Silver Mente et Manu 2022 / lk. 24-26 : fot https://www.ester.ee/record=b1242496*est

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

Mechanism of low-level microwave radiation effect on brain : frequency limits

Hinrikus, Hiie; Bachmann, Maie; Lass, Jaanus 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. 647-650 https://doi.org/10.1007/978-981-10-5122-7_162

Meie Eesti naised : Naisteadlased, kes parandavad tervist, vaimset heaolu, päikeseenergeetikat ja Eesti majandust

Velthut-Meikas, Agne; Bachmann, Maie; Leoste, Janika; Grossberg-Kuusk, Maarja; Kauk-Kuusik, Marit goodnews.ee 2023 [Meie Eesti naised : Naisteadlased, kes parandavad tervist, vaimset heaolu, päikeseenergeetikat ja Eesti majandust](#)

Method for testing the brain

Hinrikus, Hiie; Bachmann, Maie; Lass, Jaanus; Tuulik, Viu; Ubar, Raimund-Johannes 5th European Conference of the International Federation for Medical and Biological Engineering : 14-18 September 2011, Budapest, Hungary 2012 / p. 1198-1201 : ill

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, Viu 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/>

The need for a multi-disciplinary reflection about frailty and cognitive impairment in chronic kidney disease

Farisco, Michele; Zecchino, Irene; Capasso, Giovambattista; Bachmann, Maie; Fridolin, Ivo Nephrology Dialysis Transplantation 2023 / p. 1064–1066 <https://doi.org/10.1093/ndt/gfac334>

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

Non-linear analysis of the electro-encephalogram for detecting effects of low-level electromagnetic fields

Bachmann, Maie; Kalda, Jaan; Lass, Jaanus; Tuulik, Viu; Säkki, Maksim; Hinrikus, Hiie Medical & biological engineering & computing 2005 / 1, p. 142-149 : ill

Non-thermal effect of microwave radiation on human brain

Hinrikus, Hiie; Bachmann, Maie; Tomson, Ruth; Lass, Jaanus The environmentalist 2005 / 2/4, p. 187-194

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/>

Possible health effects on the human brain by various generations of mobile telecommunication: a review based estimation of 5G impact

Hinrikus, Hiie; Koppel, Tarmo; Lass, Jaanus; Roosipuu, Priit; Bachmann, Maie International Journal of Radiation Biology 2022 / p. 1210-1221 <https://doi.org/10.1080/09553002.2022.2026516> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Power spectrum distinguishes the effect of microwave stimulation on human EEG at rest

Bachmann, Maie; Kalda, Jaan; Lass, Jaanus; Tuulik, Viuu; Hinrikus, Hiie Biological Effects of EMFs 3rd International Workshop : Kos, Greece, 4-8 October 2004 : proceedings. Volume 1 2004 / p. 75-80 : ill

Quasi-thermal effect of microwave radiation

Hinrikus, Hiie; Bachmann, Maie; Lass, Jaanus Biological Effects of EMFs 3rd International Workshop : Kos, Greece, 4-8 October 2004 : proceedings. Volume 1 2004 / p. 74

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; Järveld, Mari; Raik, Jaan; Hinrikus, Hiie 4th IEEE EMBS International Conference on Biomedical and Health Informatics, BHI 2017 : Orlando, Florida, USA, 16-19 February 2017 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]

Sensitivity of human EEG to modulation frequency of microwave radiation [Electronic resource]

Tomson, Ruth; Hinrikus, Hiie; Bachmann, Maie; Lass, Jaanus; Tuulik, Viuu IFMBE proceedings 2005 / [5] p. [CD-ROM]

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>

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 https://artiklid.elnet.ee/record=b2680563*test

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

Päeske, Laura; Bachmann, Maie; Põld, 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](#)

Temporal stability and correlation of EEG markers and depression questionnaires scores in healthy people

Põld, Toomas; Päeske, Laura; Hinrikus, Hiie; Lass, Jaanus; Bachmann, Maie Scientific reports 2023 / art. 21996
<https://doi.org/10.1038/s41598-023-49237-4>

Threshold of radiofrequency electromagnetic field effect on human brain

Hinrikus, Hiie; Lass, Jaanus; Bachmann, Maie International journal of radiation biology 2021 / p. 1505-1515 : ill
<https://doi.org/10.1080/09553002.2021.1969055> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Understanding physical mechanism of low-level microwave radiation effect

Hinrikus, Hiie; Bachmann, Maie; Lass, Jaanus International journal of radiation biology 2018 / p. 877-882 : ill
<https://doi.org/10.1080/09553002.2018.1478158> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)