Grzegorz Marcin Wójcik

Dr. habil., Associate Professor

Curriculum Vitae

Scientific Biography

18.06.2013 **Habilitation in Technical Sciences in the field of Biocybernetics and Biomedical Engineering**, *Faculty of Automatic Control, Electronics and Computer Science*, Silesian University of Technology, Gliwice, Poland

13.12.2004 **Doctorate in Physical Sciences in the field of Computer Physics**, *Faculty of Mathematics, Physics and Computer Science*, Maria Curie-Sklodowska University in Lublin, Poland

2000–2004 **Doctoral studies at Institute of Physics**, *Faculty of Mathematics, Physics and Computer Science*, Maria Curie-Sklodowska University in Lublin, Poland

20.06.2000 **Master of Science in the field of Computer Physics**, *Faculty of Mathematics and Physics*, Maria Curie-Sklodowska University in Lublin, Poland

1995–2000 **Master studies in Physics**, *Faculty of Mathematics and Physics*, Maria Curie-Sklodowska University in Lublin, Poland

1991–1995 **1st Stanislaw Staszic High School in Lublin**, *Class profiled for Mathematics, Physics and Computer Science*, Poland

1983–1991 **Romuald Traugutt Primary School No. 6 in Lublin**, Poland

Employment

Maria Curie-Sklodowska University in Lublin

14.11.2022– **Senator**, *Maria Curie-Sklodowska University in Lublin*

1.10.2019– **Head of the Department of Neuroinformatics and Biomedical Engineering**, *Maria Curie-Sklodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science
Institute of Computer Science

1.10.2015– **Associate Professor**, *Maria Curie-Sklodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science
Institute of Computer Science

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1.09.2016– 30.09.2019 **Head of Department of Neuroinformatics**, *Maria Curie-Sklodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science
Institute of Computer Science

1.09.2014– 31.08.2016 **Head of Laboratory of Neuroinformatics**, *Maria Curie-Sklodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science
Institute of Computer Science

1.07.2013– 30.09.2015 **Assistant Professor with Habilitation**, *Maria Curie-Sklodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science
Institute of Computer Science

1.10.2005– 30.06.2013 **Assistant Professor**, *Maria Curie-Sklodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science
Institute of Computer Science

Polish-Japanese Academy of Information Technology

1.07.2021– **Senator PJATK**, Polish-Japanese Academy of Information Technology, Warsaw

1.07.2021– **Head of the Department of Itelligent Systems and Data Science** , *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology

1.07.2021– **Head of "Data Science" specialisation at Computer Science 2nd degree studies**, *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology

20.10.2020– **Head of "Intelligent Data Processing Systems" specialisation at Computer Science 1st degree studies**, *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology

1.10.2018– **Head of postgraduate studies "Cybersecurity of Information and Telecommunication Systems"**, *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology

1.10.2017– **Head of postgraduate studies "Big Data Engineering"**, *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology

1.10.2017– **Associate Professor**, *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology
Department of Computer Networks

University of Economics and Innovation in Lublin

1.10.2013– 30.09.2017 **Associate Professor**, *University of Economics and Innovation in Lublin*, Faculty of Transport and Computer Science

1.10.2012– 30.09.2013 **Assistant Professor**, *University of Economics and Innovation in Lublin*, Faculty of Transport and Computer Science

1.10.2008– 30.09.2009 **Dean's Proxy for the 1st Degree Graduate Studies in Computer Science**, *University of Economics and Innovation in Lublin*, Faculty of Transport and Computer Science

1.10.2007– 30.09.2012 **Lecturer**, *University of Economics and Innovation in Lublin*, Faculty of Transport and Computer Science

1st Stanislaw Staszic High School in Lublin

1.09.2004–30.09.2005 **Contract Teacher**, *1st Stanislaw Staszic High School in Lublin*, Poland

1.09.2003–31.08.2004 **Trainee Teacher**, *1st Stanislaw Staszic High School in Lublin*, Poland

Daewoo Motor Poland

3.07.2000–14.10.2000 **Analyst Programmer**, *Daewoo Motor Poland*, Lublin

1.05.2000–2.07.2000 **Application Programmer**, *Daewoo Motor Poland*, Lublin

1.02.2000–30.04.2000 **Referent**, *Daewoo Motor Poland*, Lublin

Additional

2001-2004 **Computational Neuroscience Teacher**, *Youth Academy of Skills*, Ignacy Jan Paderewski Foundation for the Promotion of Alternative Forms of Education in Lublin, Idea by Piotr Kononowicz

Projects

- 2021–2023 – pREservIng fuNdamental rIghTs In the use of digitAl technoLogIes for e-health ServicEs (REINITIALISE). Scientific Board Member, Team Member. Horizon 2020, No.: 952357
- 30.06.2022–31.05.2023 – Investigations of brain cortex activity in deep state of relaxation. Investigator. Minigrants of Maria Curie-Sklodowska University, 2nd edition.
- 13.12.2021–31.05.2022 – Head of the task "Conducting neurological and psychological tests" as part of the EEGDigiTrack Biofeedback AI project implemented by UMCS - an innovative device for personalized neurotherapy with scientifically proven effectiveness RPMA0.01.02.00-14-b459/18-00
- 15.07.2021–15.07.2022 – Understanding the Brain Fog – Research on COVID-19 Post-Infectious Chronic Fatigue Syndrome. NAWA Urgency Grants. Project Coordinator. Grant No. BPN/GIN/2021/1/00019/U/00001
- 1.07.2020–15.02.2022 – Integrated system for the treatment of speech impediments – VIRTUAL SPEECH THERAPY SYSTEM – VSTS. Chief R&D Officer. No. POIR.01.01.01-00-0842/19
- 1.07.2020–31.10.2021 – EEGDigiTrack Biofeedback AI – an innovative device for personalized neurotherapy with scientifically proven effectiveness. Senior Machine Learning Researcher. No. RPMA.01.02.00-14-b459/18-00
- 14.10.2020–30.12.2020 – Head of the task "Preparation of a dedicated analysis of the feasibility of innovations regarding the support of psychological aspects of recovery and treatment that improve the quality of life" as part of the implementation of the special purpose subsidy agreement of the Lublin Municipality for the VRMed startup. Agreement No. 76/WSP/20.

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- 2010–2012 – Autism Spectrum Disorder - Integrated Theory. Investigator. Grant of Minister of Science and Higher Education (MNiSW) No. N519 578138
- 2009–2012 – Meritorical Coordinator for ICT in the project "School of Key Competences". University of Economics and Innovation in Lublin, Poland. The project financed by the European Union from the European Social Fund and the State Budget under the Human Capital Operational Program. No. UDA-POKL.03.03.04-00-133/09/01
- 2008–2010 – Investigating of the model of primate visual system in the large-scale simulation. Head, Principal Investigator. Grant of Minister of Science and Higher Education (MNiSW) No. N519 403734
- 2009 – Meritorical Expert – content author of physics and mathematics in the project "Hand in Hand with Einstein. 2nd Edition". Betacom S.A. Warsaw, Poland. The project financed by the European Union from the European Social Fund. No. UDA-POKL.03.03.04-00-142/08-00
- 2007–2009 – Modelling and large-scale simulations of the mammalian visual cortex. Principal Investigator. Grant of Minister of Science and Higher Education (MNiSW) No. N519 01732/2120
- 2007 – Investigating the properties of the simulated mammalian visual cortex macro-neural ensembles. Project Coordinator, Principal Investigator. Grant of Maria Curie-Sklodowska University in Lublin Vice-Rector for Science
- 2004–2005 – CLUSTERIX – National Linux Cluster. Investigator. Grant of State Committee for Scientific Research (KBN) No. 6T11 2003C/06098

Scientific Visits

- 2023 – Jordan University College [JUCo], Morogoro, Tanzania
- 2023 – Mzumbe Univerity, Mzumbe, Tanzania
- 2023 – College of Business Education [CBE], Dar es Salaam, Tanzania
- 2023 – Dar es Salaam Institute of Technology [DIT], Dar es Salaam, Tanzania
- 2022 – Department of Cognitive and Brain Sciences, Ben-Gurion University of the Negev, Beersheba, Israel
- 2016 – Fondo Formación Euskadi, Trapagaran, Spain
- 2015, 2016 – Klaipeda State University of Applied Sciences, Lithuania
- 2015 – Transport and Telecommunication Institute, Riga, Latvia
- 2009, 2012, 2013 – Bergen University College, Bergen, Norway [FSS, EEA Grants, Norway Grants, Erasmus – Life-Long Learning]
- 2006, 2009, 2010 – Dept. of Physiology, Anatomy & Genetics (DPAG), University of Oxford
- 2006, 2008 – Interdisciplinary Center for Neural Computations (ICNC), Hebrew University, Jerusalem, Israel
- 2001 – Institute for Theoretical Computer Science at Technische Universitaet Graz, Austria

Research Interships

- 2005 – Edinburgh Parallel Computing Centre (EPCC), Edinburgh, United Kingdom - HPC-Europa (RII3-CT-2003-506079), with the support of the European Community - Research Infrastructure Action under the FP6 Structuring the European Re- search Area Programme.
- 2005 – Dept. of Computing Science and Mathematics of Stirling University, Stirling, United Kingdom - HPC-Europa (RII3-CT-2003-506079), with the support of the European Community - Research Infrastructure Action under the FP6 Structuring the European Re- search Area Programme.

Awards

- 2023 – 3rd Class Individual Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding service for the University
- 2023 – Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding scientific work
- 2023 – Homo Didacticus – for outstanding teaching work in the winter semester 2022/23 (UMCS)
- 2021 – 4th Class Team Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding service for the University
- 2021 – Team Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding scientific work
- 2020 – 3 × Team Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding scientific work
- 2020 – Jubilee Award for 20 years of Service for the University
- 2018 – 2nd Class Individual Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding service for the University
- 2014 – 3rd Class Individual Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding service for the University
- 2013 – Individual Award of Rector of Maria Curie-Sklodowska University in Lublin for Habilitation
- 2012 – 3rd Class Individual Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding service for the University
- 2011 – 3rd Class Individual Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding service for the University in academic year 2010/2011

Membership

- Since 8.08.2023 – Member of OT73 – Virtual Field Division of Polish Amateur Radio Union
- Since 2022 – Member of Yacht Club UMCS, Lublin District Yachting Association, Polish Yachting Association
- Since 7.06.2019 – Member of SNAJPER Lublin Shooting Club, Lublin Shooting Sport Association, Polish Shooting Sport Association
- 2016-2020 – Rector's Representative in the Council of Academic Centre of Culture "Chatka Żaka" in Lublin, Poland

- 2016-2020 – Supervisory Council Member of Centre of Transfer of Knowledge and Technology at Maria Curie-Sklodowska University in Lublin, Poland
- Since 2015 – Editorial Board Member of Bio-Algorithms and Med-Systems
- Since 2015 – Program Council of High Field Magnetic Resonance Laboratory at the ECOTECH-COMPLEX Centre in Lublin, Poland
- Since 2015 – Vice-Chairman of the Comission of Fundamentals and Applications in Chemistry, Physics and Technology, Agriculture and Medicine. Polish Academy of Sciences, Filiale in Lublin, Poland. Chairman of Section of Physics. Member since 2009
- Since 1.03.2009 – Member of National Geographic Society
- 2009-2010 – Chapter Member (area: Science) in the Competition "Promotion of the Achievements of Polish Science". Foundation OIC Poland, Lublin
- Since 8.12.2005 – Member of Polish Numismatic Society. Since 2015 Board Member of Lublin Branch

Courses

- 25 – 29.07.2022 – Intensive sailing course, Wind Hunter, Gdansk, Poland
- 16 – 17.12.2017 – Introduction to Project Management, Altkom Akademia, Lublin, Poland
- 12.02.2006 – 28.02.2006 – Changing your Mind about the Brain, workshop at Interdisciplinary Center for Neural Computations (ICNC), Hebrew University, Jerusalem, Israel
- 19.08.2002 – 13.09.2002 – EU Advanced Course In Computational Neuroscience, Obidos, Portugalia
- 1999 – Novell NetWare 4.11 Administartion Course (NW520)

Licenses & Certificates

- 30.07.2023 – Bronze Shooting Badge of Polish Schooting Sport Association, Sport Pistol (Psp20), Erma ESP 85A)
- 23.03.2023 – Gold Shooting Badge of Polish Schooting Sport Association, Air Pistol (Ppn20), FWB 65
- 2022 – Patent of Inland Skipper (No. PU/54986)
- 2022 – 1st Class Certificate of Ameteur Radio Operator (No. A-29915). Call Sign: SQ8GMW (DC.WML.5101.1697.2022.2)
- 2021 – Fundamental Neuroscience for Neuroimaging. Coursera. Johns Hopkins University.(coursera.org/verify/KK83ZTXAUM6M)
- 2019 – Shooting Patent: pistol, rifle, shotgun. (No. 61325/PAT/11/2019)
- 2019 – Shooting Sport License: pistol, rifle, shotgun (No. L69023)
- 2015 – Introduction to Programming with MATLAB (with distinction). Coursera. Vanderbilt University.
- 2002 – Cambridge Certificate in Advanced English (CAE), No. 8585438
- 1999 – Certified Novell Administrator (CNA) – intraNetWare, No. 9695185
- 1997 – Cambridge First Certificate in English (FCE), No. 976PL0100060

- 1994 – Driving Licence B-category

Foreign languages

English	Full professional proficiency
Russian	Basic proficiency
Polish	Native

Interests

Numismatics	Selected coins of Swiss Confederation and Kingdom of the Netherlands
Shooting	Pistol. Rifle. Shotgun

Publications

A. Kawala-Sterniuk, G. M. Wójcik, and W. Bauer, "Biomedical data in human–machine interaction," *Sensors*, vol. 23, no. 18, p. 7983, 2023.

K. Zemla, G. Sedek, K. Wróbel, F. Postepski, and G. M. Wojcik, "Investigating the impact of guided imagery on stress, brain functions, and attention: A randomized trial," *Sensors*, vol. 23, no. 16, p. 6210, 2023.

B. Bartosik, G. M. Wojcik, A. Kawiak, and A. Brzezicka, "How are the people in the photos judged? analysis of brain activity when assessing levels of trust and attractiveness," *arXiv preprint arXiv:2306.09171*, 2023.

K. Zemla, G. M. Wojcik, F. Postepski, K. Wróbel, A. Kawiak, and G. Sedek, "Modeling of brain cortical activity during relaxation and mental workload tasks based on eeg signal collection," *Applied Sciences*, vol. 13, no. 7, p. 4472, 2023.

K. Chlasta, P. Sochaczewski, G. M. Wójcik, and I. Krejtz, "Neural simulation pipeline: Enabling container-based simulations on-premise and in public clouds," *Frontiers in Neuroinformatics*, 2023.

G. M. Wojcik, O. Shriki, L. Kwasniewicz, A. Kawiak, Y. Ben-Horin, S. Furman, K. Wróbel, B. Bartosik, and E. Panas, "Investigating brain cortical activity in patients with post-covid-19 brain fog," *Frontiers in Neuroscience*, vol. 17, 2023.

K. Zemła, G. M. Wójcik, F. Postępski, Łukasz Kwaśniewicz, and A. Kawiak, *Selected Topics in Applied Computer Science, Jarosław Bylina, ed.*, vol. 2, ch. Investigating the Influence of Guided Imagery Relaxation on the Selected Electrophysiological Parameters of Human Body, pp. 21–37. Maria Curie-Skłodowska University Press, 2023.

E. Mikołajewska, P. Prokopowicz, Y. Chow, J. Masiak, D. Mikołajewski, G. M. Wójcik, B. Wallace, A. R. Eugene, and M. Olajossy, "From neuroimaging to computational modeling of burnout: The traditional versus the fuzzy approach—a review," *Applied Sciences*, vol. 12, no. 22, p. 11524, 2022.

A. Kawala-Sterniuk, M. Pelc, R. Martinek, and G. M. Wójcik, "Currents in biomedical signals processing—methods and applications," *Frontiers in Neuroscience*, vol. 16, 2022.

P. Schneider, G. M. Wójcik, A. Kawiak, L. Kwasniewicz, and A. Wierzbicki, "Modeling and comparing brain processes in message and earned source credibility evaluation," *Frontiers in Human Neuroscience*, vol. 16, 2022.

B. Bartosik and G. M. Wójcik, *Selected Topics in Applied Computer Science, Jarosław Bylina, ed.*, vol. 1, ch. Assessment of Attractiveness and Trust in Relation to Personality Traits — Literature Review and Research Proposal, pp. 223–232. Maria Curie-Skłodowska University Press, 2021.

K. Chlasta and G. M. Wójcik, *Selected Topics in Applied Computer Science, Jarosław Bylina, ed.*, vol. 1, ch. Liquid state machines for real-time neural simulations, pp. 233–246. Maria Curie-Skłodowska University Press, 2021.

A. Kobus, I. Codello, W. Kuniszyk-Jóźkowiak, and G. M. Wójcik, *Selected Topics in Applied Computer Science, Jarosław Bylina, ed.*, vol. 1, ch. Automatic Syllable Repetition Detection Methods in Continuous Speech, pp. 43–58. Maria Curie-Skłodowska University Press, 2021.

D. Mikołajewski, J. Masiak, E. Mikołajewska, and G. M. Wójcik, "Modelowanie obliczeniowe występowania objawów wypalenia zawodowego u informatyków i fizjoterapeutów - wyniki wstępne," *Studia i Materiały Informatyki Stosowanej*, vol. 13, no. 3, pp. 29–35, 2021.

D. Mikołajewski, J. Masiak, E. Mikołajewska, and G. M. Wójcik, "Objawy wypalenia zawodowego jako podstawa modelu obliczeniowego," *Studia i Materiały Informatyki Stosowanej*, vol. 13, no. 3, pp. 22–28, 2021.

D. Mikołajewski, J. Masiak, E. Mikołajewska, G. M. Wójcik, and J. Kopowski, "Związane z pracą niekorzystne zmiany zdrowotne w grupie zawodowej informatyków – narracyjny przegląd literatury," *Studia i Materiały Informatyki Stosowanej*, vol. 13, no. 3, pp. 13–21, 2021.

L. Kwasniewicz, G. M. Wojcik, P. Schneider, A. Kawiak, and A. Wierzbicki, "What to believe? impact of knowledge and message length on neural activity in message credibility evaluation," *Frontiers in Human Neuroscience*, vol. 15, p. 659243, 2021.

B. Bartosik, G. M. Wojcik, A. Brzezicka, and A. Kawiak, "Are you able to trust me? analysis of the relationships between personality traits and the assessment of attractiveness and trust," *Frontiers in Human Neuroscience*, p. 389, 2021.

A. Kawiak, G. M. Wojcik, P. Schneider, L. Kwasniewicz, and A. Wierzbicki, "Whom to believe? understanding and modeling brain activity in source credibility evaluation," *Frontiers in neuroinformatics*, vol. 14, p. 607853, 2020.

G. M. Wójcik, A. Kobus, J. Rogala, and U. Malinowska, "Influence of artefact removal on machine learning classification results in memory task eeg signal processing," *Bio-Algorithms and Med-Systems*, vol. 17, no. 2, p. eA30, 2021.

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K. Chlasta, G. M. Wójcik, and K. Wołk, "Liquid state machines in parallel simulations of mammalian visual system on raspberry pi.," *Bio-Algorithms and Med-Systems*, vol. 17, no. 2, p. aA36, 2021.

A. Krajka, I. Panasiuk, A. Misiura, and G. M. Wójcik, "On the mutation model used in the fingerprinting dna," *Bio-Algorithms and Med-Systems*, vol. 16, no. 4, 2020.

T. Krajka, A. Misiura, and G. M. Wojcik, "Simulation of the south-eastern polish subpopulations behaviour," in *2020 IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB)*, pp. 1–8, IEEE, 2020.

P. Schneider, G. M. Wojcik, A. Kawiak, L. Kwasniewicz, and A. Wierzbicki, "True or false: How does our brain decide about truth?," in *2020 IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB)*, pp. 1–9, IEEE, 2020.

A. Gajos-Balińska, G. M. Wójcik, and P. Stpiczyński, "Cooperation of cuda and intel multi-core architecture in the independent component analysis algorithm for eeg data," *Bio-Algorithms and Med-Systems*, vol. 16, no. 3, 2020.

A. Kawiak, G. M. Wójcik, L. Kwasniewicz, P. Schneider, and A. Wierzbicki, "Look who's talking: Modeling decision making based on source credibility," in *International Conference on Computational Science*, pp. 327–341, Springer, 2020.

Ł. Kwaśniewicz, G. M. Wójcik, A. Kawiak, P. Schneider, and A. Wierzbicki, "How you say or what you say? neural activity in message credibility evaluation," in *International Conference on Computational Science*, pp. 312–326, Springer, 2020.

G. M. Wojcik, *Simulations in Medicine, Irena Roterman-Konieczna, ed.*, ch. 3 Selected methods of quantitative analysis in electroencephalography, pp. 35–54. de Gruyter, 2020.

G. M. Wójcik, J. Masiak, A. T. Kawiak, L. K. Kwasniewicz, P. Schneider, F. Postepski, and A. Gajos-Balinska, "Analysis of decision-making process using methods of quantitative electroencephalography and machine learning tools," *Frontiers in Neuroinformatics*, vol. 13, p. 73, 2019.

G. M. Wójcik, A. Kawiak, L. Kwasniewicz, P. Schneider, and J. Masiak, "Azure machine learning tools efficiency in the electroencephalographic signal p300 standard and target responses classification," *Bio-Algorithms and Med-Systems*, vol. 15, no. 3, 2019.

W. K. Ozga, D. Zapała, P. Wierzgała, P. Augustynowicz, R. Porzak, and G. M. Wójcik, "Acoustic neurofeedback increases beta erd during mental rotation task," *Applied Psychophysiology and Biofeedback*, pp. 1–13, 2018.

P. Wierzgała, D. Zapala, G. M. Wójcik, and J. Masiak, "Most popular signal processing methods in motor-imagery bci: A review and meta-analysis," *Frontiers in Neuroinformatics*, vol. 12, p. 78, 2018.

Ł. Kwaśniewicz, P. Schneider, A. Kawiak, and G. M. Wójcik, "Comparison of mne selected functions parallelisation performance in source localisation algorithms for brain cortex activity quantitative analysis," in *Proceedings of Cracow Grid Workshop 2018*, pp. 49–51, 2018.

G. M. Wojcik, J. Masiak, A. Kawiak, L. Kwasniewicz, P. Schneider, N. Polak, and A. Gajos-Balinska, "Mapping the human brain in frequency band analysis of brain cortex electroencephalographic activity for selected psychiatric disorders," *Frontiers in Neuroinformatics*, vol. 12, p. 73, 2018.

A. Gajos-Balinska, G. M. Wojcik, and P. Stpiczynski, "Performance comparison of parallel fastica algorithm in the plgrid structures," in *ITM Web of Conferences*, vol. 21, p. 00026, EDP Sciences, 2018.

G. M. Wójcik, J. Masiak, A. Kawiak, P. Schneider, L. Kwasniewicz, N. Polak, and A. Gajos-Balinska, "New protocol for quantitative analysis of brain cortex electroencephalographic activity in patients with psychiatric disorders," *Frontiers in Neuroinformatics*, vol. 12, p. 27, 2018.

D. S. Kufel and G. M. Wojcik, "Analytical modelling of temperature effects on an ampa-type synapse," *Journal of Computational Neuroscience*, vol. 44, no. 3, pp. 379–391, 2018.

A. Gajos-Balińska, G. M. Wójcik, and P. Stpiczyński, "High performance optimization of independent component analysis algorithm for eeg data," in *International Conference on Parallel Processing and Applied Mathematics*, pp. 495–504, Springer, 2017.

Y. Chow, J. Masiak, E. Mikołajewska, D. Mikołajewski, G. M. Wójcik, B. Wallace, A. Eugene, and M. Olajossy, "Limbic brain structures and burnout—a systematic review," *Advances in medical sciences*, vol. 63, no. 1, pp. 192–198, 2018.

D. Mikołajewski, P. Prokopowicz, E. Mikołajewska, G. M. Wójcik, and J. Masiak, "Traditional versus mechatronic toys in children with autism spectrum disorders," *Acta Mechatronica - International Scientific Journal about Mechatronics*, vol. 2, no. 1, pp. 11–17, 2017.

E. Mikołajewska, J. Masiak, D. Mikołajewski, G. M. Wójcik, and B. Augustyńska, "Neurorehabilitacja oparta na dowodach naukowych - wyzwania i zagrożenia," *Niepełnosprawność i Rehabilitacja*, no. 4, pp. 227–241, 2017.

A. Gajos, G. M. Wojcik, and P. Stpiczyński, "Parallel independent component analysis algorithm – performance comparison for eeg signal," in *Proceedings of Cracow Grid Workshop 2017*, pp. 33–34, 2017.

S. Kotyra and G. M. Wojcik, "The station for neurofeedback phenomenon research," in *Recent Developments and Achievements in Biocybernetics and Biomedical Engineering: Proceedings of the 20th Polish Conference on Biocybernetics and Biomedical Engineering, Kraków, Poland, September 20-22, 2017 20*, pp. 32–43, Springer, 2018.

S. Kotyra and G. M. Wojcik, "Steady state visually evoked potentials and their analysis with graphical and acoustic transformation," in *Recent Developments and Achievements in Biocybernetics and Biomedical Engineering: Proceedings of the 20th Polish Conference on Biocybernetics and Biomedical Engineering, Kraków, Poland, September 20-22, 2017 20*, pp. 22–31, Springer, 2018.

S. Kotyra and G. M. Wojcik, *20-th Polish Conference on Biocybernetics and Biomedical Engineering*, ch. The Station for Neurofeedback Phenomenon Research, p. 29. Kraków, 2017.

S. Kotyra and G. M. Wojcik, *20-th Polish Conference on Biocybernetics and Biomedical Engineering*, ch. Steady State Visually Evoked Potentials and their analysis with graphical and acoustic transformation, p. 28. Kraków, 2017.

G. M. Wojcik, *Proceedings of the International Scientific Conference Humboldt-Kolleg of Societas Humboldtiana Polonorum*, ch. Artificial Brain – An Non- Biological Intelligence Evolution Hypothesis, pp. 50–51. Kraków, 2017.

E. Mikołajewska, D. Mikołajewski, G. M. Wójcik, B. Augustyńska, and J. Masiak, "Analiza wielkich zbiorów danych w rehabilitacji osób niepełnosprawnych," *Niepełnosprawność i Rehabilitacja*, no. 3, pp. 180–188, 2017.

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