Списък на публикациите в специализирани научни издания, равностойни на монография, и на други публикации в съответствие с член 29, параграф 3 и 6 (3) от Закона за развитие на академичния състав

на доцент д-р Мая Иванова Димитрова,

представени за участие в конкурс за заемане на академичната длъжност „професор“ в област на висше образование 5. Технически науки, професионално направление 5.2. Електротехника, електроника и автоматика, научна специалност „Приложение на принципите и методите на кибернетиката в различни области на науката“ (Роботизирани технологии с човеко-машинен интерфейс), обявен в "Държавен вестник", бр. 26 от 21.03.2023, стр. 34

4. ***Хабилитационен труд – научни публикации (не по-малко от 10) в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация*** *- 60/n за всяка публикация*

4.1. **Dimitrova, M.**, Wagatsuma, H., Krastev, A., Vrochidou, E., & Nunez-Gonzalez, J. D. (2021). A Review of possible EEG markers of abstraction, attentiveness, and memorisation in cyber-physical systems for special education. Frontiers in Robotics and AI, 8, 715962, https://doi.org/10.3389/frobt.2021.715962, **SJR=0,842, Q2** for Artificial Intelligence (Scopus), Web of Science Core Collection (WSCC), Emerging Sources Citation Index (ESCI)

4.2. **Dimitrova, M.**, Krastev, A., Zahariev, R., Vrochidou, E., Bazinas, C., Yaneva, T., & Blagoeva-Hazarbassanova, E. (2020). Robotic technology for inclusive education: A Cyber-physical system approach to pedagogical rehabilitation. CompSysTech'20: Proceedings of the 21st International Conference on Computer Systems and Technologies, ACM International Conference Proceeding Series, 293–299, https://doi.org/10.1145/3407982.3408019 **SJR=0,23** (Scopus)

4.3. **Dimitrova, M.,** Kostova, S., Lekova, A., Vrochidou, E., Chavdarov, I., Krastev, A., Botsova, R., Andreeva, A., Stancheva-Popkostadinova, V., & Ozaeta, L. (2020). Cyber-physical systems for pedagogical rehabilitation from an inclusive education perspective. BRAIN. Broad Research in Artificial Intelligence and Neuroscience, 11 (2Sup1), 186-207, https://doi.org/10.18662/brain/11.2Sup1/104 , **IF = 0,16, Q4** Web of Science Core Collection (WSCC) Emerging Sources Citation Index (ESCI)

4.4. Nikolov, V., **Dimitrova, M.**, Chavdarov, I., Krastev, A., Wagatsuma, H. (2022). Design of educational scenarios with BigFoot walking robot: A Cyber-physical system

perspective to pedagogical rehabilitation. In: Ferrández Vicente, J.M., Álvarez-Sánchez, J.R., de la Paz López, F., Adeli, H. (Eds.) Artificial Intelligence in Neuroscience: Affective Analysis and Health Applications. IWINAC 2022. Lecture Notes in Computer Science, vol 13258. Springer, Cham. https://doi.org/10.1007/978-3-031-06242-1_26, 259-269, **SJR =0,407, Q2** for Computer Science (miscellaneous) (Scopus), Web of Science Core Collection (WOCC), Conference Proceedings Citation Index – Science (CPCI-S)

4.5. Musić, J., Bonković, M., Kružić, S., Marasović, T., Papić, V., Kostova, S., **Dimitrova, M.**, Saeva, S., Zamfirov, M., Kaburlasos, V., Vrochidou, E., Papakostas, G., & Pachidis, T. (2020). Robotics and information technologies in education: four countries from Alpe-Adria-Danube Region survey. International Journal of Technology and Design Education, 32, 749–771, https://doi.org/10.1007/s10798-020-09631-9 **IF = 2,177, Q1** for Education **SJR=0,753** (Scopus), Web of Science Core Collection (WSCC), Science Citation Index Expanded (SCI-EXPANDED), Social Sciences Citation Index (SSCI)

4.6. **Dimitrova, M.** & Lekova, A. (2013). Security analysis and user acceptance of socially competent robotic systems. International Journal on Information Technologies & Security, Vol. 5, issue 4, pp. 37-46, ISSN 1313-825, Web of Science Core Collection (WSCC), Emerging Sources Citation Index (ESCI), https://www.webofscience.com/wos/woscc/full-record/WOS:000408980300005

4.7. **Dimitrova, M.**, Ruiz Garate, V., Withey, D., & Harper, C. (2023). Implicit Aspects of the Psychosocial Rehabilitation with a Humanoid Robot. In: Z. Kubincova, F. Caruso, T. Kim, M. Ivanova, L. Lancia, and M.A. Pellegrino (Eds) Methodologies and Intelligent Systems for Technology Enhanced Learning, Workshops - 13th International Conference, Lecture Notes in Networks and Systems, Springer Nature, Switzerland AG (in print) **SJR=0,15, Q4** for Computer Networks and Communications (Scimago)

4.8. Kaur, G., Bhattacharaya, B., **Dimitrova M.** (2023). Cognitive and neurocognitive indicators of perceived emotions: Implications for rehabilitation. In: Xin-She Yang, R. Simon Sherat, Nilanjan Dey, Amit Joshi (Eds.) Proceedings of Eighth International Congress on Information and Communication Technology, ICICT 2023, London, Lecture Notes in Networks and Systems, Springer Nature, Singapore, Volume 3, (in print), https://link.springer.com/book/9789819930449 **SJR=0,15, Q4** for Computer Networks and Communications (Scimago)

4.9. **Dimitrova, M**., Krastev, A., Sabev, N., & Nunez-Gonzalez, J.D. (2021). Digital and e-Learning accessibility for people with special educational needs: A robotic perspective. In 19th International Conference on Information Technology Based Higher Education and Training (ITHET) Sydney, Australia, 1-5, IEEE, https://ieeexplore.ieee.org/abstract/document/9759704 *Best Presentation Award* (Scopus)

4.10. **Dimitrova, M**., Bogdanova, G., Noev, N., Sabev, N., Angelov, G., Paunski, Y., Todorova-Ekmekchi, M., & Krastev., A. (2023). Digital Accessibility for People with Special Needs: Conceptual Models and Innovative Ecosystems, In 8 International Conference on Smart and Sustainable Technologies SpliTech 2023, Split - Bol, June 20-23, 2023, IEEE (in print) (Scopus)

4.11. **Dimitrova, M.** (2003). Cognitive modelling and Web search: Some heuristics and insights. Cognition, Brain, Behaviour, 7(3), 251-258, Galati University Press ISSN: 1224-8398 E-SSN: 2247-8655, **SJR=0,18, Q4** for Experimental and Cognitive Psychology (Scimago) https://cbbjournal.ro/index.php/en/2003/38-7-3/201-cognitive-modelling-and-web-search-some-heuristics-and-insights

7. ***Научна публикация в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация*** **-** *40/n или разпределени в съотношение на базата на протокол за приноса*

7.1. **Dimitrova, M.** (1998). Modular neural networks for high similarity pattern recognition. Cognition, Brain, Behavior. An Interdisciplinary Journal, Vol. 2, No 2, Galati University Press ISSN: 1224-8398 E-SSN: 2247-8655, 205-216, **SJR=0,18, Q4** for Experimental and Cognitive Psychology (Scimago) https://cbbjournal.ro/index.php/en/1998/20-2-2/76-modular-neural-networks-for-high-similarity-pattern-recognition

8. ***Научна публикация в нереферирани списания с научно рецензиране или в редактирани колективни томове*** **-** *20/n или разпределени в съотношение на базата на протокол за приноса*

8.1. **Dimitrova, M.,** Lekova, A., Kostova, S., Roumenin, C., Cherneva, M., Krastev, A., & Chavdarov, I. (2016). A multi-domain approach to design of CPS in special education: Issues of Evaluation and Adaptation. In: Proceedings of the 5th Workshop of the MPM4CPS COST Action (pp. 196-205) https://core.ac.uk/download/75996667.pdf

8.2. **Dimitrova, M**., Lekova, A., Chavdarov, I., Kostova, S., Krastev, A., Roumenin, C., Stancheva, V., Andreeva, A., Kaburlasos, V., & Pachidis, T. (2016). A multidisciplinary framework for blending robotics in education of children with special learning needs. In A. Palalas, H. Norman, & P. Pawluk (Eds.) Proceedings of the International Association for Blended Learning Conference (IABL 2016), 152-155.

8.3. **Dimitrova, M.,** Sabev, N., Ozaeta, L., Nikolov, V. & Krastev, A. (2022). Aspects of the intrinsic motivation as accessibility factors in the inclusive "STEAM" education. Аспекти на вътрешната мотивация като фактори на достъпността в приобщаващото " НТИИМ" образование. Science Series "Innovative STEM Education", volume 04, ISSN: 2683-1333, Institute of Mathematics and Informatics – Bulgarian Academy of Sciences, 24-31, DOI: https://doi.org/10.55630/STEM.2022.0404 (In Bulgarian)

8.4. **Dimitrova, M**., Krastev, A., Yaneva, T. & Hasarbassanova, E. (2021). Cognitive aspects of cyber-physical systems for pedagogical rehabilitation: Towards a "STEAM" approach to inclusive education. Когнитивни аспекти на киберфизичните системи за педагогическа рехабилитация: към подход "НТИИМ" в приобщаващото образование. Science Series "Innovative STEM Education", volume 03, ISSN: 2683-1333, Institute of Mathematics and Informatics – Bulgarian Academy of Sciences, 57-63. DOI: https://doi.org/10.55630/STEM.2021.0307 (In Bulgarian)

8.5. **Димитрова, М**. & Кушмерик, Н. (2004). Графично визуализиране на текстови характеристики на Web документи. Списание на Българската академия на науките, ISSN - 0007-3989, Год. 117, № 4, Стр. 40-43.

8.6. **Dimitrova, M.,** & Kushmerick, N. (2003). Dimensions of Web genre. The Twelfth International World Wide Web Conference 20-24 May 2003, Budapest, Hungary (Poster) http://www2003.org/cdrom/papers/poster/p143/p143-dimitrova.html

8.7. **Dimitrova, M**., Kushmerick, N., Radeva, P., & Villanueva, J.J. (2003). User assessment of a visual Web genre classifier. In M.H. Hamza (Ed.) Third International Conference on Visualization, Imaging, and Image Processing, VIIP, Vol. II, September 8–10, 2003, Benalmádena, Spain, 886-889, ISBN: 0-88986-382-2, ISSN: 1482-7921, https://www.actapress.com/Abstract.aspx?paperId=14442

8.8. **Димитрова, М.,** Бояджиев Осиковска, С. (2000). Невронен метод за класифициране на стил на човеко-компютърно взаимодействие в адаптивни интерфейсни системи. Международна конференция

АВТОМАТИКА&ИНФОРМАТИКА'2000, Том 2, София, 24-26 октомври, 2000г., 119-122.

8.9. Ossikovska, S., **Dimitrova, M.**, Lahchev, L. & Sotirov, T. (2009). Overall system reliability assessment of medical equipment under environmental influences. In Romansky, R. (Ed.) Proceedings of the International Conference on Information Technologies (InfoTech-2009), ISBN 978-954-438-771-6, 181-186.

8.10. **Dimitrova, M.** (2011). Social sensor design for embedded systems. In Proceedings of the International Workshop on Human-Computer Interaction and eLearning Systems (HCIeLS 2011), 15-16 September 2011, Varna, Bulgaria, 393-400, https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=a39b6febb073cbbba633468d568a689086377ec2

8.11. Kaburlasos, V., Pachidis, T., Papakostas, G.A., **Dimitrova, M.**, Kostova, S., & Chavdarov, I. (2016). Transformations from a symbol language to a sign language by a humanoid robot for blended learning: Preliminary application results. In A. Palalas, H. Norman, & P. Pawluk (Eds.) Proceedings of the International Association for Blended Learning Conference (IABL 2016) 142-146.

8.12. **Dimitrova, M.** (2022). Essential 'human' features of the cyber-physical nurse. Biomedical Journal of Scientific & Technical Research, Volume 46, 1, 36979-36981, DOI: 10.26717/BJSTR.2022.46.007285, https://biomedres.us/fulltexts/BJSTR.MS.ID.007285.php

8.13. **Dimitrova, M.** (2005). "Brain-like" intelligent agents in Web learning. In: R. Romansky (Ed.) Proceedings of the 19th International Conference on Systems for Automation of Engineering and Research (SAER-2005), 24-25 September, 2005, Varna, Bulgaria, ISBN 954-438-501-0, 222-227.

8.14. **Dimitrova, M**., & Wagatsuma, H. (2015). Designing humanoid robots with novel roles and social abilities. Lovotics, 3(112), 2, https://www.omicsonline.org/peer-reviewed/designing-humanoid-robots-with-novel-roles-and-social-abilities-67398.html

8.15. **Dimitrova, M**., Manios, M., Nuñez-Gonzalez, J. D., Wagatsuma, H., Krastev, A., & Karatsioras, H. (2019). Disruptive innovation technology for inclusive education. Information Technologies and Control, Online ISSN: 2367-5357, 26-31, http://www.aksyst.com:8081/Sai/Journal/Docum/Vol_1_04_2019.pdf

9. ***Публикувана глава от колективна монография*** *-10/n*

9.1. **Dimitrova, M.** (2016). Towards design of high-level synthetic sensors for socially-competent computing systems. In: M. Raisinghani (Ed.) Revolutionizing Education through Web-Based Instruction, IGI Global, pp. 20-34. https://doi.org/10.4018/978-1-4666-9932-8.ch002

9.2. **Dimitrova, M.** & Wagatsuma, H. (2011). Web Agent Design Based on Computational Memory and Brain Research. In: N. Tang (Ed.). Information Extraction from the Internet, iConcept Press Ltd., Hong Kong, ISBN: 978-0980733037, pp. 35-56.

9.3. **Dimitrova, M.** (2001). Cognition, Culture and Computers in Continuous Education. In: O. Benga & M. Miclea (Eds.) Development and Cognition, Cluj University Press, Cluj, ISBN: 973 809 5824, pp. 21-57.

9.4. **Dimitrova, M.** (2007). The Educational Media of the Web: Levels of Cognitive Involvement. In: Hadjiiski, M., Poli, R. (Eds.) Proceedings of SOLON–Sofia Lectures of Ontology. Marin Drinov Publishing House, Sofia, ISBN: 978-954-322-332-9, pp. 148-158.

9.5. **Dimitrova, M**. Wagatsuma, H., Tripathi, G. N., & Ai, G. (2019). Learner Attitudes towards Humanoid Robot Tutoring Systems: Measuring of Cognitive and Social Motivation Influences. In: Dimitrova, M. & Wagatsuma, H. (Eds.). Cyber-Physical Systems for Social Applications (pp. 1-24). IGI Global, Hershey, PA, USA, ISBN: 97815225578796 https://www.igi-global.com/chapter/learner-attitudes-towards-humanoid-robot-tutoring-systems/224416