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List of Publications

July 2, 2026

A. PEER-REVIEWED SCIENTIFIC ARTICLES

Journals

1. H. Mohammadi, E. Immonen, M. Heydarzadeh J. Plosila, and H. Haghbayan. Aging-aware Fleet Management for Electric Vehicle Routing Problem, Computers & Industrial Engineering, 217, Elsevier, 2026.
2. K. Somasundaram and J. Plosila. Genetic Algorithm Based Multipath Optimization for Multimobile Robot Navigations. Engineering Reports, 8 (2), Wiley, 2026.
3. S. Shahsavari, H. Haghbayan, A. Miele, E. Immonen, and Juha Plosila. A Coordinated Approach to Control Mechanical and Computing Resources in Mobile Robots, IEEE Transactions on Robotics, 41: 347-363, IEEE, 2025.
4. M. Katta, T. K. Ramesh, and J. Plosila. AS-Router: A Novel Allocation Service for Efficient Network-on-Chip. Engineering Science and Technology, an International Journal., 50, doi: 10.1016/j.jestch.2023.101607, Elsevier, 2024.
5. H. Haghbayan, A. Miele, O. Mutlu, and J. Plosila. Run-time Resource Management in CMPs Handling Multiple Aging Mechanisms. IEEE Transactions on Computers, 72 (10): 2872-2887, IEEE, 2023.
6. H. Mahboob, J. Yasin, S. Jokinen, M.-H. Haghbayan, J. Plosila, and M. Mahboob Yasin. DCP-SLAM: Distributed Collaborative Partial Swarm SLAM for Efficient Navigation of Autonomous Robots. Sensors, 23 (2), doi: 10.3390/s23021025, MDPI, 2023.
7. M. Katta, T. K. Ramesh, and J. Plosila. A Novel Technique for Flit Traversal in Network-on-Chip Router. Computing, 105: 2647–2673, doi: 10.1007/s00607-023-01200-x, Springer, 2023.
8. M. Rabah, H. Haghbayan, E. Immonen, and J. Plosila. An AI-in-Loop Fuzzy-Control Technique for UAV's Stabilization and Landing. IEEE Access, 10, doi: 10.1109/ACCESS.2022.3208685, 2022.
9. A. Tahir, H. Haghbayan, J. Böling and J. Plosila. Energy-efficient Post-failure Reconfiguration of Swarms of Unmanned Aerial Vehicles. IEEE Access, 10, doi: 10.1109/ACCESS.2022.3181244, 2022.
10. A. Kelati, E. Nigussie, I. Ben Dhaou, J. Plosila, and H. Tenhunen. Real-Time Classification of Pain Level Using Zygomaticus and Corrugator EMG Features. Electronics, 11(11), 1671, doi: http://dx.doi.org/10.3390/electronics11111671, MDPI, 2022.

11. S. Shahsavari, M. Rabah, E. Immonen, M.-H. Haghbayan. Remote Run-Time Failure Detection and Recovery Control for Quadcopters. Journal of Integrated Design and Process Science (JIDPS), SDPS, 2022.
12. F. Hosseinpour, A. Naebi, S. Virtanen, T. Pahikkala, H. Tenhunen, and J. Plosila. A Resource Management Model for Distributed Multi-Task Applications in Fog Computing Networks. IEEE Access, 9, 152792-152802, doi: 10.1109/ACCESS.2021.3127355, 2021.
13. J. N. Yasin, M-H. Haghbayan, M. Yasin, and J. Plosila. Swarm Formation Morphing for Congestion-Aware Collision Avoidance. Heliyon 7(8), Elsevier, 2021.
14. M. Katta, T. K. Ramesh, and J. Plosila. SB-Router: A Swapped Buffer Activated Low Latency Network-on-Chip Router. IEEE Access 9, 126564-126578, doi: 10.1109/ACCESS.2021.3111294, 2021.
15. J. N. Yasin, H. Mahboob, M.-H. Haghbayan, M. M. Yasin, and J. Plosila. Energy-efficient Navigation of an Autonomous Swarm with Adaptive Consciousness. Remote Sensing, 13(6), MDPI, 2021.
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21. J. N. Yasin, S. A. S. Mohamed, M.-H. Haghbayan, J. Heikkonen, H. Tenhunen, J. Plosila. Unmanned Aerial Vehicles (UAVs): Collision Avoidance Systems and Approaches. IEEE Access 8, 105139 – 105155, 2020.
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26. A. Majd, G. Sahebi, M. Daneshtalab, J. Plosila, S. Lofti, and H. Tenhunen. Parallel Imperialist Competitive Algorithms. Concurrency and Computation: Practice and Experience, DOI: 10.1002/cpe.4393, Wiley, 2018.
27. F. Hosseinpour, J. Plosila, and H. Tenhunen. Smart Data: A New Perspective of Tackling the Big Data Phenomena Leveraging a Fog Computing System. International Journal of Digital Content Technology and its Applications (JDCTA), 10(5):119-130, www.globalcis.org/jdcta/ppl/JDCTA3783PPL.pdf, GlobalCIS, 2016.
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