

Advanced Modelling Frameworks for the Digital Twin of an Autonomous Electric Vehicle Propulsion Drive System = Autonomoose elektrisõiduki veoelektrijami digitaalse kaksiku täiustatud modelleerimise raamistikud

Mohamed, Mahmoud Ibrahim Hassanin 2025 <https://digikogu.taltech.ee/et/Item/6df09867-e34b-45f1-b04e-b97c08b90589>
https://www.ester.ee/record=b5746300*est <https://doi.org/10.23658/taltech.31/2025>

Conceptual modelling of an EV-permanent magnet synchronous motor digital twin

Mohamed, Mahmoud Ibrahim Hassanin; Rjabtšikov, Viktor; Jegorov, Sergei; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants 2022 IEEE 20th International Power Electronics and Motion Control Conference (PEMC) : Brasov, Romania, 25-28 Sept. 2022 : proceedings 2022 / p. 156-160 <https://doi.org/10.1109/PEMC51159.2022.9962943>

Development of emerging technology-driven NordPlus competence network in the Baltic and Nordic regions

Kunicina, Nadezhda; Bruzgien, Rasa; Narbutaite, Lina; Rassõlkin, Anton; Mohamed, Mahmoud Ibrahim Hassanin; Balandin, Sergey 2024 35th Conference of Open Innovations Association (FRUCT) : proceedings Proceedings of the 2024 / p. 407-412 : ill <https://doi.org/10.23919/FRUCT61870.2024.10516359> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Digital shadow of an electric vehicle-permanent magnet synchronous motor drive for real-time performance monitoring

Mohamed, Mahmoud Ibrahim Hassanin; Rjabtšikov, Viktor; Rassõlkin, Anton Digital twins and applications 2025 / 12 p <https://doi.org/10.1049/dgt2.12024>

Digital Twin as a virtual sensor for wind turbine applications

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Digital twin development of an EV-permanent magnet synchronous motor as a virtual torque sensor

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Digital twin service unit development for an EV induction motor fault detection

Rjabtšikov, Viktor; Mohamed, Mahmoud Ibrahim Hassanin; Asad, Bilal; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants; Kuts, Vladimir; Stepien, Mariusz; Krawczyk, Mateusz 2023 IEEE International Conference on Electric Machines and Drives (IEMDC) 2023 / 5 p <https://doi.org/10.1109/IEMDC55163.2023.10239085>

Digital twin-based EV permanent magnet synchronous motor for condition monitoring

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Electric and hybrid vehicles : From smart energy storage systems to mechanical transmission

Sekhri, Even; Mohamed, Mahmoud Ibrahim Hassanin; Zequera, Rolando Antonio Gilbert; Rassõlkin, Anton Smart Electric and Hybrid Vehicles : Advancements in Materials, Design, Technologies, and Modeling 2025 / p. 71-126 <https://doi.org/10.1002/9781394225040.ch3>

EV-Permanent magnet synchronous motor control strategy evaluation based on digital twin concept

Mohamed, Mahmoud Ibrahim Hassanin; Rjabtšikov, Viktor 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 5 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227410>

EV-powertrain test bench for digital twin development

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Identification and characterization of modulation scheme in an EV-PMSM control strategy for digital twin modeling

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Novel digital twin concept for industrial application. Study case: propulsion drive system

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Overview of digital twin platforms for EV applications

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Overview on digital twin for autonomous electrical vehicles propulsion drive system

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Propulsion drives and control algorithms of electrical vehicles

Mohamed, Mahmoud Ibrahim Hassanin; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants Handbook of power electronics in autonomous and electric vehicles 2024 / p. 139-159 <https://doi.org/10.1016/B978-0-323-99545-0.00009-9>

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Teooria ja praktika sümbioos inseneriõppes ehk elektriagamite tulevik

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Validation of an EV-permanent magnet synchronous motor model based on analytical dynamic approach

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