

Background for development methodology for creating the digital twin for propulsion drive of an electric vehicle

Rjabtšikov, Viktor 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tallinn, Estonia, September 8-10, 2021 2022 / p. 27-28 : ill https://www.ester.ee/record=b5457278*est

Concept of the test Bench for electrical vehicle propulsion drive data acquisition

Rassõlkin, Anton; Rjabtšikov, Viktor; Vaimann, Toomas; Kallaste, Ants; Kuts, Vladimir 2020 XI International Conference on Electrical Power Drive Systems (ICEPDS), Saint-Petersburg, Russia, October 4-7, 2020 2020 / p. 35-42 : ill <https://doi.org/10.1109/ICEPDS47235.2020.9249078>

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

Ibrahim, Mahmoud; 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>

Creating digital twins fo electric vehicles using Unity 3D, Unreal Engine, and Nvidia Omniverse : a comprehensive overview

Rjabtšikov, Viktor 22nd International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Pärnu, Estonia, August 23-26, 2023 2023 / p. 21-22 : ill https://www.ester.ee/record=b5570906*est

Design of an additively manufactured polymer composite electrical machine

Sarap, Martin; Kallaste, Ants; Naseer, Muhammad Usman; Tiismus, Hans; Rjabtšikov, Viktor; Ghahfarokhi, Payam Shams; Vaimann, Toomas; Aman, Alexander; Kutia, Mykhailo 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 5 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227413>

Digital twin of an electrical motor based on empirical performance model

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Digital Twin of Wind Generator for Modelling Various Turbine Characteristics

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Digital twin of wind generator to simulate different turbine characteristics using IoT

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

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Digital Twin service unit for AC motor stator inter-turn short circuit fault detection

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

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EV-powertrain test bench for digital twin development

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Experimental investigation of high viscosity on oil spray cooling system with hairpin winding

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Interface development for digital twin of an electric motor based on empirical performance model

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Modeling battery energy storage systems based on remaining useful lifetime through regression algorithms and binary classifiers

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Overview of digital twin platforms for EV applications

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Parametric digital twin of autonomous electric vehicle transmission

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Possibilities of changing the transport characteristics of the TEP70 locomotive

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Propulsion drive system data measurement for digital twin test bench validation

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ROS middle-layer integration into Unity3D as an interface option for propulsion drive simulations of autonomous vehicles

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ROS middle-layer integration to Unity 3D as an interface option for propulsion drive simulations of autonomous vehicles

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

Ibrahim, Mahmoud; Rjabtšikov, Viktor; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants 2022 International Conference on Electrical Machines (ICEM) 2022 / p. 2384-2390 <https://doi.org/10.1109/ICEM51905.2022.9910755>