

Analysis of possible faults and diagnostic methods of the Cartesian industrial robot

Autsou, Siarhei; Rassõlkin, Anton; Vaimann, Toomas; Kudelina, Karolina Proceedings of the Estonian Academy of Sciences 2022 / p. 227-24 : ill <https://doi.org/10.3176/proc.2022.3.04> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative study of field-oriented control model in application for induction and synchronous reluctance motors for life-cycle analysis

Autsou, Siarhei; Saroka, Viktor; Karpovich, Dzmitry; Rassõlkin, Anton; Gevorgov, Levon; Vaimann, Toomas; Kallaste, Ants; Belahcen, Anouar; Rassõlkin, Anton 2018 25th International Workshop on Electric Drives: Optimization in Control of Electric Drives (IWED) 2018 / p. 1-5 : ill <https://doi.org/10.1109/IWED.2018.8321371>

Condition monitoring of a Cartesian robot with a mechanically damaged gear to create a fuzzy logic control and diagnosis algorithm

Autsou, Siarhei; Kudelina, Karolina; Vaimann, Toomas; Rassõlkin, Anton; Kallaste, Ants Applied sciences 2024 / art. 4241 <https://doi.org/10.3390/app14104241> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Digital twin of wind generator for modelling various turbine characteristics

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Fault tolerant control and diagnosis strategies for cartesian industrial robot motion control planning system =

Tõrketaluvusega juhtimis- ja diagnostikastrateegiad tööstusliku karteesianroboti liikumise planeerimise juhtimissüsteemi jaoks

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The impact of control environments on global parameters of electrical machines in case of broken rotor bars

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The impact of load on global parameters of electrical machines in case of healthy and broken rotor bars

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Influence of different tooth belt transmission faults on the work of a cartesian robot

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Optimal control of automatic manipulator for elimination of galvanic line load oscillation

Autsou, Siarhei; Rassõlkin, Anton; Vaimann, Toomas; Demidova, Galina; Saroka, Viktor; Karpovich, Dzmitry; Kallaste, Ants Periodica polytechnica electrical engineering and computer science 2021 / 15 p. : ill <https://doi.org/10.3311/PPee.15893> [Journal metrics](#)

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Overview of the use of Bellman dynamic programming method to eliminate oscillations in mechanical and electrical assemblies of technical objects

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Reducing of hanger-to-motor oscillations of galvanic line auto-operator

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Studing the impact of gearbox faults on the operations of the cartesian robot

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Study of bearing currents in induction machine : diagnostic possibilities, fault detection, and prediction

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The usage of fuzzy logic for detecting mechanical faults in gearboxes of robotic system

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