

**A current spectrum-based algorithm for fault detection of electrical machines using low-power data acquisition devices**  
**Asad, Bilal; Raja, Hadi Ashraf; Vaimann, Toomas; Kallaste, Ants;** Pomarnacki, Raimondas; Hyunh, Van Khang Electronics 2023 / art. 1746 <https://doi.org/10.3390/electronics12071746> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Digital Twin as a virtual sensor for wind turbine applications**

**Mohamed, Mahmoud Ibrahim Hassanin; Rassölkin, Anton; Vaimann, Toomas; Kallaste, Ants;** Zakis, Janis; Hyunh, Van Khang; Pomarnacki, Raimondas Energies 2023 / art. 6246 <https://doi.org/10.3390/en16176246> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Digital twin of wind generator for modelling various turbine characteristics**

**Raja, Hadi Ashraf; Autsou, Siarhei; Kudelina, Karolina; Rjabtšikov, Viktor; Vaimann, Toomas; Kallaste, Ants;** Pomarnacki, Raimondas; Hyunh, Van Khang 2023 International Conference on Electrical Drives and Power Electronics (EDPE) 2023 / p. 1-5 <https://doi.org/10.1109/EDPE58625.2023.10274050>

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

**Raja, Hadi Ashraf; Kudelina, Karolina; Rjabtšikov, Viktor; Vaimann, Toomas; Kallaste, Ants;** Pomarnacki, Raimondas; Hyunh, Van Khang Proceedings of the Future Technologies Conference (FTC) 2023. Vol. 1 2023 / p. 123-132 [https://doi.org/10.1007/978-3-031-47454-5\\_9](https://doi.org/10.1007/978-3-031-47454-5_9) [Conference proceedings at Scopus](#) [Article at Scopus](#)

**Exploring the limits of early predictive maintenance in wind turbines applying an anomaly detection technique**

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**Improved fault classification and localization in power transmission networks using vae-generated synthetic data and machine learning algorithms**

Khan, Muhammad Amir; **Asad, Bilal; Vaimann, Toomas; Kallaste, Ants;** Pomarnacki, Raimondas; Hyunh, Van Khang Machines 2023 / art. 963 <https://doi.org/10.3390/machines11100963> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Preliminary analysis of bearing current faults for predictive maintenance**

**Kudelina, Karolina; Raja, Hadi Ashraf; Vaimann, Toomas; Kallaste, Ants;** Pomarnacki, Raimondas; Hyunh, Van Khang 2023 IEEE International Conference on Electric Machines and Drives (IEMDC) 2023 / 5 p. : ill <https://doi.org/10.1109/IEMDC55163.2023.10238934>

**Preliminary analysis of mechanical bearing faults for predictive maintenance of electrical machines**

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