

### **Advances in machine fault diagnosis**

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### **Applications of digital twin across industries : a review**

Singh, Maulshree; Srivastava, Rupal; Fuenmayor, Evert; **Kuts, Vladimir**; Qiao, Yuansong; Murray, Niall; Devine, Declan Applied sciences 2022 / art. 5727 <https://doi.org/10.3390/app12115727>

### **Common-mode voltage analysis and reduction for the quasi-Z-source inverter with a split inductor**

Liu, Wenjie; Yang, Yongheng; Kerekes, Tamas; **Liivik, Elizaveta**; **Vinnikov, Dmitri**; Blaabjerg, Frede Applied sciences 2020 / art. 8713, 13 p. : ill <https://doi.org/10.3390/app10238713> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Comparative evaluation of the air core magnetic design for MHz+ switching frequency**

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### **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](#)

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### **Effect of Si addition on microstructure and mechanical properties of SiC ceramic fabricated by direct LPBF with CVI technology**

Wang, Yipu; Wang, Pei; Li, Liqun; Zhang, Jian; Zhang, Yulei; Peng, Jin; Wang, Xingxing; Kang, Nan; El Mansori, Mohamed; **Prashanth, Konda Gokuldoss** Applied sciences 2025 / art. 8585 <https://doi.org/10.3390/app15158585>

### **Effects of night ventilation on indoor air quality in educational buildings—a field study**

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Soudagar, Manzoore Elahi M.; Khan, Haris Mahmood; Khan, M. Yunus; Razzaq, Luqman; Asif, Tahir; Mujtaba, M. A.; **Hussain, Abrar** Applied sciences 2021 / p. 7071–7089 <https://doi.org/10.3390/app11157071> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Hydroacoustic and pressure turbulence analysis for the assessment of fish presence and behavior upstream of a vertical trash rack at a run-of-river hydropower plant**

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### **Hysteresis measurements and numerical losses segregation of additively manufactured silicon steel for 3D printing electrical machines**

**Tiismus, Hans**; **Kallaste, Ants**; Belahcen, Anouar; **Vaimann, Toomas**; **Rassõlkin, Anton**; Lukichev, Dmitry Applied sciences 2020 / art. 6515, 15 p <https://doi.org/10.3390/app10186515> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Implementing an AI-based digital twin analysis system for real-time decision support in a custom-made sportswear SME**

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### **In situ Al3BC/Al composite fabricated via solid-solid reaction: An investigation on microstructure and mechanical behavior**

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**Integrating Digital Twin Software Solutions with Collaborative Industrial Systems : A Comprehensive Review for Operational Efficiency**

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**Mechanical behavior of Ti6Al4V scaffolds filled with CaSiO3 for implant applications**

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

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**Pavement distress detection with deep learning using the orthoframes acquired by a mobile mapping system**

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**A review of harmonic detection, suppression, aggregation and estimation techniques**

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**Robust design optimization and emerging technologies for electrical machines: challenges and open problems**

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### **SHS produced TiB<sub>2</sub>-Si powders for selective laser melting of ceramic-based composite**

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### **Signal acquisition and algorithm design for bioimpedance-based heart rate estimation from the wrist**

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### **Structure defects and photovoltaic properties of TiO<sub>2</sub>:ZnO/CuO solar cells prepared by reactive DC magnetron sputtering**

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### **The cluster computation-based hybrid FEM–analytical model of induction motor for fault diagnostics**

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### **Time dependency of current harmonics for switch-mode power supplies**

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### **Transient modeling and recovery of non-stationary fault signature for condition monitoring of induction motors**

Asad, Bilal; Vaimann, Toomas; Belahcen, Anouar; Kallaste, Ants; Rassölkin, Anton; Shams Ghahfarokhi, Payam; Kudelina,

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### **Trends and challenges in intelligent condition monitoring of electrical machines using machine learning**

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