Advances in machine fault diagnosis
Vaimann, Toomas Applied sciences 2021 / art. 7348, 5 p https://doi.org/10.3390/app11167348 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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
Matiushkin, Oleksandr; Pakhaliuk, Bohdan; Gutierrez-Escalona, Javier; Romero-Cadaval, Enrique; Husev, Oleksandr; Zakis, Janis Applied sciences 2025 / art. 8820 https://doi.org/10.3390/app15168820

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

Design and simulation of the robust ABS and ESP fuzzy logic controller on the complex braking maneuvers
Aksjonov, Andrei; Augsburg, Klaus; **Vodovozov, Valery** Applied sciences 2016 / p. 1-18 : ill https://doi.org/10.3390/app6120382 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Effects of night ventilation on indoor air quality in educational buildings—a field study
Lestinen, Sami; Kilpeläinen, Simo; **Kosonen, Risto**; Valkonen, Maria; **Jokisalo, Juha**; Pasanen, Pertti Applied sciences 2021 / art. 4056, 20 p. : ill https://doi.org/10.3390/app11094056 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Enhanced control strategy for three-level T-type converters in hybrid power-to-X systems
Sassonker Elkayam, Moria; **Vinnikov, Dmitri** Applied sciences 2025 / art. 2409 https://doi.org/10.3390/app15052409

Experimental analysis of engine performance and exhaust pollutant on a single-cylinder diesel engine operated using moringa oleifera biodiesel
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
Schmidt, Marc B.; **Tuhtan, Jeffrey Andrew**; Schletterer, Martin Applied sciences 2018 / art. 1723, 20 p. : ill https://doi.org/10.3390/app8101723 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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
Raamets, Tõnis; **Karjust, Kristo**; **Majak, Jüri**; **Hermaste, Aigar** Applied sciences 2025 / art. 7952 https://doi.org/10.3390/app15147952

In situ Al3BC/Al composite fabricated via solid-solid reaction: An investigation on microstructure and mechanical behavior
Maity, Tapabrata; Prakash, Aditya; Roy, Debdas; **Prashanth, Konda Gokuldoss** Applied sciences 2025 / art. 5189 https://doi.org/10.3390/app15095189

Influence of internal pressure on hollow section steel members in fire
Kervalishvili, Andrei; **Talvik, Ivar** Applied sciences 2023 / art. 149 https://doi.org/10.3390/app14010149

Integrating Digital Twin Software Solutions with Collaborative Industrial Systems : A Comprehensive Review for Operational Efficiency
Guerra-Zubiaga, David; Aksu, Murat; Richards, Gershom; **Kuts, Vladimir** Applied Sciences 2025 / art. 7049

https://doi.org/10.3390/app15137049

Language of driving for autonomous vehicles
Kalda, Krister; **Pizzagalli, Simone Luca**; **Soe, Ralf-Martin**; **Sell, Raivo**; **Bellone, Mauro** Applied sciences 2022 / art. 5406 https://doi.org/10.3390/app12115406 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Mechanical behavior of Ti6Al4V scaffolds filled with CaSiO3 for implant applications
Rahmani Ahranjani, Ramin; **Antonov, Maksim**; **Kollo, Lauri**; **Holovenko, Yaroslav**; **Prashanth, Konda Gokuldoss** Applied sciences 2019 / art. 3844, 11 p. : ill https://doi.org/10.3390/app9183844 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Modeling battery energy storage systems based on remaining useful lifetime through regression algorithms and binary classifiers
Zequera, Rolando Antonio Gilbert; **Rjabtšikov, Viktor**; **Rassõlkin, Anton**; **Vaimann, Toomas**; **Kallaste, Ants** Applied sciences 2023 / art. 7597 https://doi.org/10.3390/app13137597 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Optimization of physical activity recognition for real-time wearable systems : effect of window length, sampling frequency and number of features
Allik, Ardo; **Pilt, Kristjan**; **Karai, Deniss**; **Fridolin, Ivo**; **Leier, Mairo**; **Jervan, Gert** Applied sciences 2019 / art. 4833, 14 p. : ill https://doi.org/10.3390/app9224833 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Optimization of radiators, underfloor and ceiling heater towards the definition of a reference ideal heater for energy efficient buildings
Ferrantelli, Andrea; **Võsa, Karl-Villem**; **Kurnitski, Jarek** Applied sciences 2018 / art. 2477, 22 p. : ill https://doi.org/10.3390/app8122477 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Optimizing the processing of shellfish (Mytilus edulis and M. trossulus Hybrid) biomass cultivated in the Low Salinity Region of the Baltic Sea for the extraction of meat and proteins
Adler, Indrek; **Kotta, Jonne**; Tuvikene, Rando; Kaldre, Katrin Applied sciences 2022 / art. 5163, 11 p. : ill https://doi.org/10.3390/app12105163 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Overheating risk and energy demand of nordic old and new apartment buildings during average and extreme weather conditions under a changing climate
Farahani, Azin Velashjerdi; **Jokisalo, Juha**; Korhonen, Natalia; Jylhä, Kirsti; Ruosteenoja, Kimmo; **Kosonen, Risto** Applied sciences 2021 / art. 3972, 25 p. : ill https://doi.org/10.3390/app11093972 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Pavement distress detection with deep learning using the orthoframes acquired by a mobile mapping system
Riid, Andri; Lõuk, Roland; **Pihlak, Rene**; **Tepljakov, Aleksei**; **Vassiljeva, Kristina** Applied sciences 2019 / art. 4829, 22 p. : ill https://doi.org/10.3390/app9224829 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

PPG and bioimpedance-based wearable applications in heart rate monitoring – a comprehensive review
Lapsa, Didzis; Janeliukstis, Rims; **Metshein, Margus**; Selavo, Leo Applied sciences 2024 / art. 7451 https://doi.org/10.3390/app14177451 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Principles and methods of servomotor control : comparative analysis and applications
Autsou, Siarhei; **Kudelina, Karolina**; **Vaimann, Toomas**; **Rassõlkin, Anton**; **Kallaste, Ants** Applied sciences 2024 / art. 2579 https://doi.org/10.3390/app14062579 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

A review of harmonic detection, suppression, aggregation and estimation techniques
Daniel, Kamran; **Kütt, Lauri**; **Iqbal, Muhammad Naveed**; **Shabbir, Noman**; **Raja, Hadi Ashraf**; **Sardar, Muhammad Usman** Applied sciences 2024 / art. 10966 https://doi.org/10.3390/app142310966 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Robust design optimization and emerging technologies for electrical machines: challenges and open problems
Orosz, Tamas; **Rassõlkin, Anton**; **Kallaste, Ants**; Arsenio, Pedro; Panek, David; Kaska, Jan; Karban, Pavel Applied sciences 2020 / art. 6653, 33 p. : ill https://doi.org/10.3390/app10196653 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

SHS produced TiB2-Si powders for selective laser melting of ceramic-based composite
Liu, Le; **Aydinyan, Sofiya**; **Minasyan, Tatevik**; **Hussainova, Irina** Applied sciences 2020 / art. 3283, 12 p. : ill https://doi.org/10.3390/app10093283 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Signal acquisition and algorithm design for bioimpedance-based heart rate estimation from the wrist
Lapsa, Didzis; **Metshein, Margus**; **Krivošei, Andrei**; Janeliukstis, Rims; **Märtens, Olev**; Elsts, Atis Applied sciences 2024 / art.

9632 https://doi.org/10.3390/app14219632 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Simulation of the hot deformation and fracture behavior of reduced activation ferritic/martensitic 13CrMoNbV steel
Shaikh, Asad Alamgir; Churyumov, Alexander; Pozdniakov, Andrey; Churyumo, Tatiana Applied sciences 2020 / art. 530 ; 12 p. : ill https://doi.org/10.3390/app10020530 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Small magnus wind turbine : modeling approaches
Lukin, Aleksandr; **Demidova, Galina**; **Rassõlkin, Anton**; Lukichev, Dmitry; **Vaimann, Toomas**; Anuchin, Alecksey Applied sciences 2022 / art. 1884 https://doi.org/10.3390/app12041884 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Structure defects and photovoltaic properties of TiO2:ZnO/CuO solar cells prepared by reactive DC magnetron sputtering
Wisz, Grzegorz; Sawicka-Chudy, Paulina; Wal, Andrzej; **Sibinski, Maciej**; Potera, Piotr; Yavorskyi, Rostyslav; Nykyruy, Lyubomyr; Płoch, Dariusz; Bester, Mariusz; Cholewa, Marian; Chernikova, Olena M. Applied Sciences 2023 / 13 p. : ill https://doi.org/10.3390/app13063613

The cluster computation-based hybrid FEM–analytical model of induction motor for fault diagnostics
Asad, Bilal; **Vaimann, Toomas**; **Belahcen, Anouar**; **Kallaste, Ants**; **Rassõlkin, Anton**; **Iqbal, Muhammad Naveed** Applied sciences 2020 / art. 7572, 15 p. : ill https://doi.org/10.3390/app10217572 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Time dependency of current harmonics for switch-mode power supplies
Iqbal, Muhammad Naveed; **Kütt, Lauri**; **Asad, Bilal**; **Vaimann, Toomas**; **Rassõlkin, Anton**; Demidova, Galina Applied sciences 2020 / art. 7806, 12 p. : ill https://doi.org/10.3390/app10217806 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Towards improving the durability and overall performance of PV-ETICS by application of a PCM layer
Heim, Dariusz; Wieprzkowicz, Anna; Knera, Dominika; **Ilomets, Simo**; **Kalamees, Targo**; Spitalsky, Zdenko Applied sciences 2021 / art. 4667, 13 p. : ill https://doi.org/10.3390/app11104667 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Transient modeling and recovery of non-stationary fault signature for condition monitoring of induction motors
Asad, Bilal; **Vaimann, Toomas**; **Belahcen, Anouar**; **Kallaste, Ants**; **Rassõlkin, Anton**; Ghahfarokhi, Payam Shams; **Kudelina, Karolina** Applied sciences 2021 / 17 p. : ill https://doi.org/10.3390/app11062806 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Trends and challenges in intelligent condition monitoring of electrical machines using machine learning
Kudelina, Karolina; **Vaimann, Toomas**; **Asad, Bilal**; **Rassõlkin, Anton**; **Kallaste, Ants**; **Demidova, Galina** Applied sciences 2021 / art. 2761, 19 p. : ill https://doi.org/10.3390/app11062761 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

A tutorial on dynamics and control of power systems with distributed and renewable energy sources based on the DQ0 transformation
Levron, Yoash; **Belikov, Juri**; Baimel, Dmitry Applied sciences 2018 / art. 1661, 48 p. : ill https://doi.org/10.3390/app8091661 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Urban open platform for borderless smart cities
Soe, Ralf-Martin; Ruohomäki, Timo; **Patzig, Henry** Applied sciences 2022 / art. 700 https://doi.org/10.3390/app12020700 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS