

Design and control for high reliability power electronics: state of the art and future trends

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Development and utilization of synthetic signals for fault diagnostics of electrical machines

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Envisioning the future renewable and resilient energy grids – a power grid revolution enabled by renewables, energy storage, and energy electronics

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Isolated high-frequency link PFC rectifier with high step-down factor and reduced energy circulation

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A new flying capacitor-based buck-boost converter for dual-purpose applications

Hemmati Shahsavar, Tala; Vosoughi Kurdkandi, Naser; Husev, Oleksandr; Babaei, Ebrahim; Sabahi, Mehran; Khoshkbar-Sadigh, Arash; **Vinnikov, Dmitri** IEEE journal of emerging and selected topics in industrial electronics 2023 / p. 447-459 <https://doi.org/10.1109/JESTIE.2023.3238322>

A new seven-level transformer-less grid-tied inverter with leakage current limitation and voltage boosting feature

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Optimal tuning of resonant and repetitive based controller for single-phase buck-boost inverter with unfolding circuit

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Regenerative passive snubber circuit for high-frequency link converters

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