

**Analysis of design requirements and optimization possibilities of partial power converter for photovoltaic string applications in DC microgrids**

**Chub, Andrii; Hassanpour, Naser; Yadav, Neelesh; Jalakas, Tanel; Blinov, Andrei; Vinnikov, Dmitri** IEEE Access 2024 / p. 14605-14619 <https://doi.org/10.1109/ACCESS.2024.3354375>

**High-efficiency partial power converter for integration of second-life battery energy storage systems in DC microgrids**

**Hassanpour, Naser; Chub, Andrii; Yadav, Neelesh; Blinov, Andrei; Vinnikov, Dmitri** IEEE Open Journal of the Industrial Electronics Society 2024 / 15 p <https://doi.org/10.1109/OJIES.2024.3389466>

**Improved maximum power point tracking algorithm for step-up/down partial power converters operating around zero partiality**

**Yadav, Neelesh; Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri** IEEE journal of emerging and selected topics in power electronics 2024 / p. 1984-1994 <https://doi.org/10.1109/JESTPE.2024.3354843>

**Maximum power point tracking algorithm for step-up/down partial power converters with improved performance around zero partiality**

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**Step-up/down partial power converter with enhanced MPPT efficiency around zero partiality**

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