

**Buck-boost resonant Z-source partial power converter**

**Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri** 3rd International Conference on Smart Grid and Renewable Energy (SGRE) 2022 / p. 1-6 <https://doi.org/10.1109/SGRE53517.2022.9774095>

**Current-fed dual inductor push-pull partial power converter**

**Abdelrahim Abdelghafour, Omar Mohamed; Vinnikov, Dmitri; Chub, Andrii; Blinov, Andrei** 2022 IEEE 20th International Power Electronics and Motion Control Conference (PEMC) : Brasov, Romania, 25-28 Sept. 2022 : proceedings 2022 / p. 327-332 <https://doi.org/10.1109/PEMC51159.2022.9962937>

**DC integration of residential photovoltaic systems : a survey**

**Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Vinnikov, Dmitri; Blinov, Andrei** IEEE Access 2022 / p. 66974-66991 <https://doi.org/10.1109/ACCESS.2022.3185788> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**An efficient non-inverting buck-boost converter with improved step up/down ability**

**Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri; Pefitsis, Dimosthenis** Energies 2022 / art. 4550 <https://doi.org/10.3390/en15134550> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**High-Gain Seven-Level Switched-Capacitor Two-Stage Multi-Level Inverter**

Ahmed, Hassan Yousif; **Abdelrahim Abdelghafour, Omar Mohamed**; Ali, Ziad M. Frontiers in Energy Research 2022 / art. 869662 <https://doi.org/10.3389/fenrg.2022.869662>

**New high-gain non-inverting buck-boost converter**

**Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri** IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society 2021 / p. 1-6 : ill <https://doi.org/10.1109/IECON48115.2021.9590003> [Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**New high-gain transformerless DC/DC boost converter system**

Ahmed, Hassan Yousif; **Abdelrahim Abdelghafour, Omar Mohamed**; Ali, Ziad M. Electronics 2022 / art. 734 <https://doi.org/10.3390/electronics11050734> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Performance evaluation of step-up/down current-source partial power converters for PV applications**

**Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri** 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCon): conference proceedings 2022 / 5 p <https://doi.org/10.1109/RTUCon56726.2022.9978890>

**A series partial power converter based on dual active bridge converter for residential battery energy storage system**

**Hassanpour, Naser; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri; Abdelrahim Abdelghafour, Omar Mohamed** 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCon), 15-17 Nov. 2021 : conference proceedings 2021 / p. 1-6 : ill <https://doi.org/10.1109/RTUCon53541.2021.9711725>